THE LANCET.

VOL. II.] LONDON, SATURDAY, MAY 3, 1834. [1833-34.

UNIVERSITY OF LONDON.

LECTURES
ON
COMPARATIVE ANATOMY
AND
ANIMAL PHYSIOLOGY,

DELIVERED BY

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LECTURE XXVIII.

ON THE OSTEOLOGY OF QUADRUMANA AND BIMANA.

ALL transitions in organic forms are effected by imperceptible gradations, and according to determinate and uniform laws. This is not more obvious in the separate systems of internal organization than in the outward shape of the entire aggregates. So that there can be no organs developed in the semi-erect climbing *quadrumanous* animals, or in the erect *bimana*, which have not passed through their phases of development in the inferior tribes. Without galagos and loris and lemurs, the organization of the higher quadrumana would be as anomalous as that of man would appear, without gibbons and orangs, and chimpanzes and negros. The bats and the galeopitheci lead us to the lemurs and the monkey tribes, for the cheiroptera present numerous affinities to the quadrumana, both in their solid and their soft parts, as in the possession and the proximity and the forms of the three kinds of teeth, the complete and constant development of the clavicles, the form of the scapula, the great development of the hand, and the freedom of the thumb, the prehensile character of the foot, the form of the stomach, the alimentary canal, and the cæcum-coli, the scrotal testes, the pendent penis, and the pectoral mammæ.

The *quadrumana* have received this name from the opposable nature of the great toe on the hind feet, as well as that of the thumb on the anterior extremities, and they are sometimes designated by the Greek appellation *tetracheira*, to correspond with the name of the last order *cheiroptera*, the most obvious and constant character of the present order being the possession of four hands. They come nearest to man in the form and proportions of their skeleton, and of their separate bones—in the general disposition of their muscular system, and its adaptation for a semi-erect position of the body—in their great cerebral development, the perfection and the equable development of their organs of the senses, their intellectual capacity and complicated instincts—in the character of their digestive, their circulating, their respiratory, and their glandular apparatus, and in all that relates to the production and rearing of their young. These most elevated of all the inferior animals are organized to select, to obtain, and to digest, the succulent ripe fruits of trees, and to inhabit the rich and shady forests of tropical climates. They leave to the squirrels and the sloths the buds and the leaves, to the ponderous elephants and rhinoceroses the branches and the stems, and to the beavers and other rodentia the dry bark of the trees. Their delicate organization is adapted only for the richest products of the vegetable kingdom, and from the soft and nutritious quality of their food, the broad enamelled crowns of their molar teeth are studded with rounded tubercles, their stomach is simple, their intestine moderate, and their *cæcum-coli* comparatively small. With a high cerebral and muscular development, corresponding with their elevated rank in the scale, and the elevated position of their food on the trees, they are the most agile and sportive of all the mammalia, and to suit their climbing habits they are provided with prehensile organs at every point; their teeth, their tail, their feet, their hands, assist in their gambling move-

ments, and in their boundings from branch to branch, and from tree to tree, or in their struggles with their numerous assailants lurking among the branches. From this inclined position of the trunk in climbing, we observe all parts of their skeleton and of their internal organs adapted for the semi-erect posture of the body; and from the weight of their trunk being thus relieved from that of the extremities, by their numerous prehensile organs, and the inclined or suspended position of their body, the whole bones of the skeleton partake of those slender, lengthened, and light proportions, which are best suited for their nimble movements. You see nothing of those massive pillars which support the heavy horizontal trunks of the larger quadrupeds, in the light and elastic limbs of the quadrumana.

Though the richest fruits are the natural and favourite food of this order, the greater number of the inferior quadrumana partake willingly of the mixed kind of food of insectivorous animals, feeding on insects, which many of them seize when upon the wing, on the eggs of birds, or even on fishes which they take from the water, as well as on seeds, and grains, and fruits. This kind of life, and habitual position of the trunk, require them to have the head more balanced and supported upon the two condyloid processes of the occipital bone than in those horizontal forms of quadrupeds where the head is suspended vertically at the end of the vertebral column, by a strong and elastic *ligamentum nuchæ*, passing backwards to the dorsal vertebræ. We therefore find that in these quadrumanous animals the occipital foramen, by the enlargement of the superior laminæ of the cranial vertebræ, has advanced under the base of the cranium to a considerable extent forwards towards the centre, so that they require much less of that ligamentous attachment and suspension of the head, which is so common and powerful in the larger quadrupeds, and is calculated to impede its motions, while it gives security for the support of its great weight.

The animals that we are speaking of are capable of the most active and lively movements, which is an endowment necessary for the simple act of climbing aloft on trees for their food; but when we observe the innumerable enemies which they have to encounter upon the trees, the cunning and stratagem which they must often have recourse to for self-defence, and for obtaining their food when it consists of living insects, we see that they require to have a disposition of all their bones and muscles calculated to give velocity and extent to the movements of the joints, rather than security and strength. We are advancing to that form and attitude of the whole frame which characterizes our species,—the entirely erect position of the trunk, and to that form and structure of all the internal organs which are the most elevated in development, or the most perfect to which organization has yet reached upon the surface of this planet; and the intermediate gradations to the human form are, therefore, here in the highest degree interesting, as they affect each particular part, both of the solid frame-work and of the softer internal organs. In ascending from the insectivorous quadrupeds and bats, through the lemurs and baboons to the gibbons and the orangs, we arrive gradually at that erect position, those graceful proportions, and that commanding attitude of the whole frame, which appear so peculiar to our species, from our being less familiar with the connecting links,—the highest of the quadrumana, and the lowest of the bimana, concealed in the inaccessible wilds of tropical forests.

In that soft-furred, warm-clad, nocturnal species, the fox-muzzled lemurs of Madagascar, as in this of the *mococo* or *lemur catta* (*Fig.* 114), we still find the lengthened form of the skull and face, the

Fig. 114

numerous molar teeth, and the adaptation, in the whole skeleton, for the horizontal posture of the trunk, which is common to most of the inferior orders of mammalia. The occipital foramen is still situated at the posterior margin of the cranium, and directed obliquely downwards and forwards. The mastoid cells are as large as those of a carnivorous quadruped, and although the orbit is surrounded by an osseous margin, it is continuous behind with the temporal fossa. The human sutures are here permanent, and correspond with the great development of the cranial cavity, and of the hemispheres of the brain. The sagittal suture continues onwards through the frontal bone, and the anterior frontals are as distinct as in the crocodiles, between the frontal, nasal, maxillary, and lachrymal bones. The temporal muscles are feeble, the skull is arched laterally, the temporal fossa small,

the zygomatic arch feeble and almost horizontal, and the glenoid surface is flat, for the transverse flat condyle of the lower jaw. The lachrymal bones extend much from the orbits over the face, and are perforated on their facial portion. The nasal bones, unlike those of the higher quadrumana, are long, straight longitudinally, separate, broad, expanded above, and arched laterally throughout their course. The upper and lower maxillary bones have a lengthened form to afford space for numerous teeth, and the condyle of the lower jaw is nearly as low as the alveoli of the teeth, from the shortness of the ramus. The angle of the lower jaw passes acutely backwards, and the coronoid process mounts upwards to a great distance through the zygomatic arch. The inferior incisor teeth, four in number, as in the simiæ and man, project straight from the jaw like the inferior incisors of a kanguroo, as they do also in the *stenops* and *galago* and *lichanotus*. The proportions of the face and of the whole head become shortened, as we ascend from the makis, and loris, and tarsius, and galago, and lichanotus, to the ouistitis and the other simiæ of the old and new continent.

Looking at the sutures of the skull in the simiæ, we find that they have the same general disposition as in the human skull. The frontal bone has its two portions early united in these quadrumanous animals, and the slightly arched frontal bone is separated from the expanded and smooth parietals, by a high coronal suture. The parietals, which we have so commonly seen united and anchylosed in the carnivorous quadrupeds, in the cheiroptera, and in many of the inferior grades and classes of vertebrata, are here permanently detached, as in man. The lambdoidal, the sagittal, the squamous, and the coronal sutures advance forwards on the cranium, more and more, as the cerebral centres develop within, and enlarge the cranial cavity. The number and the permanence of the sutures in the quadrumana and in man appear to be intimately connected with, or dependent on, the high degree of development of the great nervous centres. A rapid process of ossification in the cranium is necessary to keep these numerous bones in conjunction at their margins during the rapid development and growth of the enclosed brain; and this rapid extension and expansion of the contained parts prevent the bones from anchylosing. They require more numerous points for receiving increase, which points are given to them by having these numerous sutures traversing all parts of the head. We perceive that the face in the simiæ is greatly diminished, in its proportion to the cranial cavity, when compared with the long-muzzled lemurs and inferior animals we have been hitherto considering. Those organs of the senses, lodged in the face, which we perceived comparatively so large in the inferior animals, are obviously beginning here to occupy a much smaller proportional space, and the face which contains those organs is thus becoming proportionally small as we ascend in the scale, compared with the cavity of the cranium for the great cerebral centres, the seat of all the intellectual operations.

Give large ears to an ass, to beat with auditory impressions upon its dull brain, or to hear the braying of its mate; give large eyes to the almost brainless fish, to steer its course in the dark abyss; give large nostrils to a dog to hunt its prey; but here, in the sagacious monkeys, we have got a watchful sentinel within the cranium, which requires but a hint to give it a lively perception. A hint is enough to the wise. It is the proportional development of the great centres of nervous energy, which impresses an elevated human-like form on their head, and also causes the parallelism of their orbits.

As the muzzle thus shortens, the facial angle enlarges, by the elevation and projection of the frontal bone, and by this shortening of the jaws less space is afforded for numerous molar teeth. The orbits approximate, assume a parallel direction forwards, separated only by a narrow ethmoid, and they become separated by an osseous partition, formed by the frontal and malar bones, from the temporal fossa. The temporal fossa becomes reduced in size, the zygomatic arch short and straight, the condyloid articulation flat and free, the lachrymal bone confined to the orbit, and the nasal bones flat, narrow, short, and often anchylosed together. The intermaxillary bones continue as permanently separate bones, up to the orangs, and the incisors above and below are the same in number as in man, but those teeth are inclined outwards. The canine teeth, as instruments of defence and of prehension, continue largely developed, and the sharp tubercles of the molar teeth of the insectivorous and nocturnal makis, become more flat and rounded in the higher quadrumana, corresponding with the softer quality of their succulent and juicy food. The simiæ of the old continent have the same number of teeth, or the same dental formula, as man; but those of America have an additional molar tooth on each side of each jaw, excepting the two small ouistitis, the *jacchus*, and the *midas*, which have the same number as in the human jaws.

In the powerful muscular dog-faced baboons, the *cynocephali* (*Fig.* 115) of

Fig. 115

Africa and Asia, the muzzle is lengthened as in the lemurs, the facial angle is nearly as low as thirty degrees, the tusks are large as in a wolf, the skeleton is adapted for the horizontal posture, and the animals are strong and fierce; yet even these present in the minuter details of their skeleton a very close approximation to the higher quadrumana. The four incisors above and below are large, and nearly perpendicular; the dental formula is the same as the human, the molar teeth have broad crowns, with a double row of comparatively rounded tubercles, their nasal bones are narrow, depressed, and anchylosed together, their orbits are parallel, approximated, and completely separated by an osseous septum from the temporal fossæ, the lachrymal bone and groove are confined to the orbit, the lower jaw is deep, its ramus ascending almost perpendicularly, and the coronoid process is short and feeble. Their cranium is large, and expanded laterally, the frontals are early anchylosed, the parietals are arched and smooth, the temporal fossæ are small, and the zygomatic arch is feeble and depressed.

Their transverse occipital ridge is strongly marked, and their occipital foramen is placed far forwards under the base of the skull. The frontal extends backwards, in an angular form, to the sagittal suture, the parietals are small and thrown back, so that the great *ala* of the sphenoid does not reach them, as it does even in the lemurs, and is bounded above by the frontal and the temporal bones. The occipital is small, flat, and almost confined to a basilar aspect. This large head is chiefly composed of the bones of the face, from the sphenoid to the intermaxillaries, and especially of the jaws, for the reception of very large teeth. The infra-orbitary foramen, you observe, is here subdivided into numerous apertures, as we frequently find it in higher quadrumana, and, as in most other genera, there is no distinct supra-orbitary foramen.

The intermaxillary bones, of which you see no trace in these adult human skulls, we have thus traced as constant and separate elements of the cranial vertebræ, from the osseous fishes to the higher quadrumanous mammalia, and comparing the human adult skull with that of the inferior vertebrata, we might suppose that it was formed in this part upon a different plan. But all comparisons in organic forms and structures, made with a view to trace resemblances, are to be instituted only between objects naturally allied. The links that connect the facial bones of the human skull with those of the gibbons, the baboons, and the lower quadrumana, are to be looked for in the orangs of India and Africa, and in the lowest of the negro race, where the facial angle and the forms of the several bones of the face and cranium approach, and the general proportions of the whole body. The animal called the chimpanze (*troglodytes niger*), the black orang, inhabiting, in troops, the woody plains of Congo and Angola,—an animal erect, with broad shoulders, a wide pelvis, short arms, a prominent nose and heel, and human-like proportions in every part,—walking with a staff, defending itself by blows with stones and staves,—forming for itself a little hut, which is safe in the recesses of the forests,—seizing the negresses and carrying them to the woods, treating them, it is said, with kindness, and capable, as we know, of a high degree of physical education. It is an animal which cannot speak, but expresses its meaning by gestures and grimaces—capable of being taught to use instruments and utensils of different kinds, to spread and make its bed to repose itself upon it,—covering its body, it is said, with leaves, and forming acquaintance or attachments, not with inferior grades of animals, but associating, by preference, with our species, as appears from the accounts of the habits of those animals which have been brought on board vessels. In that animal, and in the long-armed large Indian orang, we find that the two intermaxillary bones which you observe permanently detached in the inferior kinds of quadrumana, holding the incisors of the upper jaw, are also anchylosed with the upper jaw-bone before their adult state. That is precisely what takes place with the intermaxillaries in man. We know that man has the intermaxillary bones at an early period; and I have occasionally seen those bones, with their sutures, retained in the human skull to a pretty advanced period, detached from the superior maxillaries.

The nasal bones become more prominent above the general level of the face, as we ascend from the *cynocephali* to this *troglodytes*; the jaw-bones become shorter, the ramus and the incisors more perpendicular. There is a fifth tubercle in the

crown of the posterior molar tooth of the lower jaw in the *macacus* and the *cynopithecus*, which appears as a remnant of the sixth molar tooth found in that situation in the simiæ of America. It marks an inferiority of type, no simiæ of America approaching near to the orangs, or even to the gibbons of the old continent.

The kind of motion of the jaws in bruising and masticating the succulent fruits on which those higher quadrumanous animals chiefly subsist, requires that there should be a considerable extent of motion laterally, as well as upwards and downwards. On that account we observe that the condyle of the lower jaw is flat. The coronoid process ascends but a short way through the zygomatic arch,—the process which we saw so prominent and long in ruminating quadrupeds, which move their jaw also from side to side. The glenoid cavity of the temporal bone for the reception of that condyle has, as you perceive, a flat surface, so that it has the freest motion with the inter-articular cartilage, to move laterally. This is the more necessary, on account of the use which those quadrumanous animals make of the large sac or pouch seen on the sides of the cheek. They use that pouch for containing quantities of food which they collect, and which they do not require or desire immediately to digest, or are not able to contain at the time in the stomach, serving then the office of a paunch to contain the food, until they are ready to masticate it, and also partially to soften it, and to take it when hunger or convenience requires.

Thus, then, you observe, that the occipital bone in the higher *simiæ* rests upon the atlas and upon the vertebral column, in a position more near to the centre of the base of the skull. In the anterior part of the skull you observe in most of those quadrumanous animals no trace of the supra-orbital foramen, the frontal nerve and artery coming generally over the margin of the orbit, or through a notch, as we often see in man. The turbinated bones are small, and correspond with the short and small flat nose; but the ethmoid plates present a considerable surface for the olfactory nerves. The body of the sphenoid generally remains divided transversely in the *sella turcica*, to an advanced period of development, being the natural separation of the bodies of two distinct cranial vertebræ.

In the cervical vertebræ we observe, that in place of those bifurcated spinous processes which you know to characterize the cervical vertebræ of man, these processes here terminate in a sharp single spine, so far differing from those of the human skeleton, as you observe in this mona monkey (*cercopithecus mona*, *Fig.* 116).

Fig. 116

There is considerable strength and mobility of the neck, for the motions of the heavy head. In the vertebral column we observe a near approach to man in the numbers and forms of the dorsal vertebræ. The lumbar vertebræ are generally more numerous, and have greater mobility than in the human body. Those additional lumbar vertebræ appear to be formed partly at the expense of the sacrum. They present the transverse processes generally much more directed upwards towards the head, than you observe in the corresponding transverse processes of the human skeleton; so that the muscles are strengthened which are attached to them, and which pass downwards. The coccygeal vertebræ of the quadrumanous animals are, for the most part, prolonged much beyond the extremity of the trunk, forming a long moveable tail. That, in ani-

mals which are organized to climb upon trees, is, for the most part, an important organ of prehension. We see, particularly in the simiæ of America, that this organ is much developed, and forms in that tribe what is called a prehensile tail—a tail which is muscular and flexible, and is not furred over upon all its lower surface, but is provided often with a tough, callous, thick epidermis, which is capable of firmly holding objects when the tail is twined around them, and possessing at the same time great sensibility like a hand. This we do not meet with in the old world, where the tails of the quadrumana are covered over with fur. The true prehensile organ is peculiar to America. In the coccygeal vertebræ we observe that where they are most employed for prehension, their number, their mobility, and the security of their articulations, are increased; that where they are not employed as an organ to assist in climbing, or for the suspension of the body, the bodies of those vertebræ are much more lengthened and cylindrical.

These quadrupeds, climbing and living upon trees, require to possess great power and extent of motion in the whole arms, and, at the same time, great security in the articulations. The security you perceive to be necessary, from the violent exertions they put the arms to. You observe those long-armed gibbons and spider-monkeys, bounding and springing from branch to branch, and tree to tree, when pursued, or in their gambols, for the simiæ are naturally lively, active, playful, lascivious, and often disgusting animals, from their so perfectly caricaturing the human form, expression, and action. They burlesque our species by their forms, gestures, and grimaces, as we have already seen a burlesque upon those comparatively elevated animals, in the slow-creeping, long-armed, tree-climbing sloths. Now those violent efforts on the trees, where they are seen to throw themselves from one tree to another, to grasp the branches with their hands, and to come down with their whole weight on the arm, then with a bound to force themselves up again to a higher branch—we see that for such strong motions, and for such active exertions of the whole body, great lightness in the bones, and great security in the articulations, both of the trunk and extremities, are required, and great flexibility and extent of motion in all their parts. Thus we find in all these quadrumana the clavicles are strong and human-like in their curved sigmoid form. It has already, in most of the species, that sigmoid curvature which is so marked in the human clavicle, and from which that bone has received its name. The scapula has also, from the similarity of the uses to which the anterior extremities are applied, a form corresponding much with the form of the human scapula, having an extensive surface both above and below the very elevated spine, and, consequently, an extensive margin towards the vertebral column; but still this bone is longer and narrower than the human. The glenoid cavity is comparatively deep, and the coracoid and acromion processes are large in these quadrumanous animals, so that the head of the humerus plays upon its cavity with security. The scapula is most human-like in the orangs. The sternum of the quadrumana is observed to present, in the lowest forms of makis and lemurs, an approach towards the narrow compressed form of that bone, so common in inferior orders of quadrupeds; but in the simiæ, and especially in the orangs, it is depressed from before backwards, presenting the expanded and flat form which it has in man. The sides of its elements appear sometimes to remain separate through life in the *pitheci*. In the adult *pongo* of the Hunterian museum, the sternum is composed of a double row of pieces, but in the adult *pongo* of the Paris museum, there is a single row of four pieces, and the xiphoid cartilage.

In the humerus we perceive the form to approach somewhat to the human, but it is generally more arched, with its convexity forwards at the upper part. The radius and the ulna are long and slender, and constantly separated, to admit of the freest pronation and supination. The bones of the carpus are frequently nine in number, there being five in the second row, making one additional to the number found in the human wrist, where there are only four in each of the two rows. It appears that the division of one of the ordinary bones, to give greater mobility to the wrist here, gives rise to the ninth bone. Flexibility for prehension is of the greatest importance to be preserved, both at the termination of the arms and legs of quadrumana, that, like a whip, they may twine round the branches, and then with a firm muscular force secure the grasp which they have obtained; therefore it is that we find the wrist so subdivided in the quadrumana. The hands present the same number of bones as the human in the metacarpus, and in the phalanges of the fingers, which are all long, slender bones, except the last phalanges which support the flat nails of the simiæ. The thumb is never so much developed, or so opposable, in the quadrumana as in the human hands. In all the

quadrumana of the old world, the thumb is distinctly observed projecting from the integuments; but in the genus *ateles* of the new world we see only a small rudiment—a tubercle projecting from the inner side of the hand, and sometimes not a trace of a thumb projecting from the integuments, although its bones are present beneath the skin of the hand.

In the region of the pelvis you observe a remarkable difference in the inferior genera of quadrumana, when compared with the pelvis of the human body, and that this depends chiefly upon the narrowness of the pelvis, and the lengthening of the iliac bones; that is accompanied with a lengthening of the glutei muscles, the extensors of the femur; for we must look to this structure of the bones with relation to the living movements, to the active instruments of the rapid and powerful movements of those animals. The lengthening of the glutei muscles, like the lengthening of the muscles attached to the head of the humerus, has the effect, from their mode of insertion, of moving the bones to which those muscles are attached through a greater space in a given time. It increases the velocity of the motion, while it loses in strength. The expanded form of those iliac bones in the human species is for the insertions of an immense number of separate fibres, short and strong, of the glutei muscles. Those very powerful extensors are required to keep the whole trunk of the human species upright on the legs when walking or standing. But that is not the use to which the glutei muscles are applied in the quadrumana; in them they are applied for those bounding and leaping movements which they perform with their posterior extremities, which are not in them mere pillars of support, but organs of prehension, formed like arms with hands. The sacrum most frequently consists of three vertebræ. The coccyx of the orang consists of four as in man. The iliac bones in the orangs are short and expanded, flat outwards from the sides of the sacrum. The sacro-iliac articulation and the whole pelvis are placed in a longitudinal direction. The tuberosity of the ischium is bent outwards and backwards, projecting laterally to a great extent, and is a part of great thickness and breadth in most quadrumana below the orangs. That is the part which the quadrumanous animals employ to rest the whole trunk upon in a state of repose. It is covered in the living state with a thick, very dense, cartilaginous mass, called the callosities of the nates. Those callosities are not covered with hair, but are dense cartilaginous masses, covering these broad tuberosities of the ischium. The skin adheres firmly to those cartilaginous masses, and they adhere most firmly to the tuberosity of that bone. This broad base, formed by the projection of the two expanded tuberosities of the ischium, is that upon which the quadrumanous animals repose themselves in feeding, in sleeping, in rearing their young, or in doing any acts while their trunk is in a state of repose.

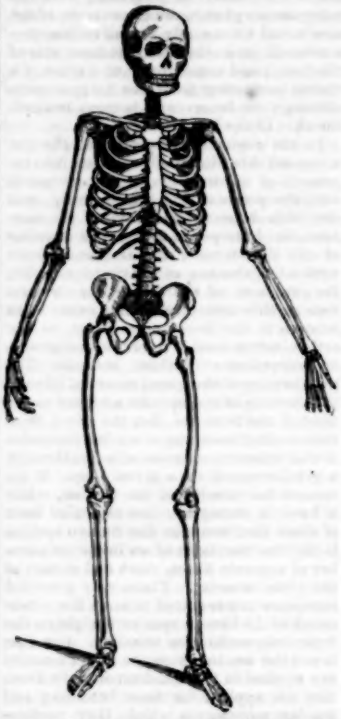
The femur differs from the human femur, being, like the humerus, bent more forwards, and in having the neck of the bone shorter, and passing out more at right angles to the body of the bone. The *trochanter major*, you perceive, is by this raised much higher than the head of the femur. This trochanter is a part of great importance in the active motions of these quadrupeds. The tibia and fibula are long and slender, widely detached, and admit of greater extent of movement on each other than in the human leg, to allow the foot to be employed as a hand. From the uses to which the legs of quadrumanous animals are applied, we perceive that it is necessary that the calcaneum should project much less than in the human foot. Were the calcaneum to project as much backwards as in the human foot, it might serve the quadrumanous animal better as a mere organ of support, but it would prevent that motion of extension which is necessary in the foot as an organ for seizing or grasping objects. At the lower end of the tibia and fibula, which are both strongly connected with the tarsus, the astragalus has a peculiar oblique twist outwards, which is increased by the form of the calcaneum, and which obliquity is communicated through the scaphoid, the cuboid, and the three cuneiform bones, to the metatarsus, so that by resting thus on the outer margin of the tarsus and metatarsus, the foot has assumed a position very different from that of the human foot, and very different from that in which you perceive the feet placed in some of the skeletons before you, which are placed in an unnatural position, with the plants of the feet resting on the ground as in man. The quadrumanous animals, even the most elevated species, seldom apply the entire planta of the foot to the ground, but they apply only the outer margin of the foot to the earth. By thus applying the outside of the foot to the ground (when these animals are resting upon the foot), the thumb or inner toe is free, and attached in a very oblique manner to the internal cuneiform bone, which is here placed much below the others; it is free, and opposable to the other more lengthened toes of the foot; so that the foot is

by this mechanism constructed like a long prehensile hand. They can thus use the foot for standing or walking, while at the same time it grasps firmly an object with the thumb or the toes, the outer part only of the foot being then applied to the ground. But here, in London, I have seen the living chimpanze, the black orang of Africa, spontaneously apply the whole planta of the foot to the ground in walking; sometimes it did and sometimes not; but the orang of India, which was alive beside it, never did,—it applied always the outside of the little toe to the ground in walking. Twisting the foot of the monkeys outwards to be applied flat to the ground, in the manner of the human foot, is an act painful to them; those animals, therefore, do not spontaneously assume that attitude, although we daily see that by torture they can be made to stand in any position. The foot of the quadrumana has the same number of bones in the tarsus, metatarsus, and toes, as are found in the human foot.

MAN forms alone the highest order of the highest class of the animal kingdom, and the highest form of organization which has yet been developed on this planet, and it is by tracing his organs upwards, from the monad, through all their phases of development and their various metamorphoses, that we come to perceive and to comprehend the nature of the peculiarities which distinguish his structure, his functions, and his form. Without the inferior grades of organization to interpret the more complex, that of man would for ever remain an impenetrable mystery, and the light which is thrown upon the highest is reflected back upon the lowest by the increased interest thus attached to their study. The whole organization of man is adapted for the erect position of the trunk, by which his anterior extremities are left free for various employments, and his head, raised to a height above the ground, has the principal organs of the senses directed forwards.

By the great development of his cerebral organs, the cranium (*Fig.* 117) is large, and the organs of the senses being confined to a narrow space, the face is small, and is nearly straight from the frontal bone to the chin, from the slight projection of the muzzle, excepting in the negro, where the projection of the jaws and teeth, and the receding of the frontal bone, reduce the facial angle more near to that of the orangs. The occipital foramen and the two occipital condyles are advanced further forwards on the base of the skull than in any of the quadrumana,

Fig. 117



so that his head is nearly poised by the centre of its base on the atlas, and on the perpendicular vertebral column. His forehead, his nasal bones, and his chin, project more than in any of the quadrumana, the incisors are more nearly perpendicular, the canini shorter, and the tubercles of the molares more rounded. The squamous portion of the temporal bone, the great ala of the sphenoid, and the superior portion of the occipital, are large; the temporal fossa, the zygoma, and the coronoid process of the lower jaw, are small; the ramus of the lower jaw is larger, and forms a more acute angle with the base, than in the last order of quadrupeds; the condyle of the lower jaw is more elevated and convex, and the glenoid cavity for its reception is deeper. The nasal process of the superior maxillary and the lachrymal bone pass more into the orbit, and the orbits are more parallel in their direction, which gives greater precision to all his visual impressions.

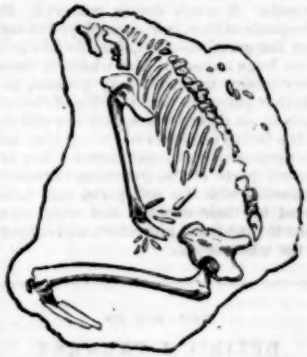
His vertebral column has a greater sigmoid curvature, the cervical vertebræ have their spinous processes more broad, short, and bifurcated; the transverse processes of the lumbar vertebræ extend more at right angles from the bodies, the sacrum is longer, broader, and more arched, and the coccyx is comparatively small. The ribs are more convex, the sternum is more short and broad, the clavicles are more curved and strong, and the scapula is more short and broad, than in the former animals. The glenoid cavity of the scapula is more lateral in its direction, the humerus, with a large articular rounded head, is more straight, the olecranon of the ulna comparatively short, and the bones of the thumb are more lengthened, and more opposable to the other fingers.

The pelvis is shorter and broader than in the quadrumana, the iliac bones are more expanded and convex, more extended over the acetabulum, and with a longer crest; the tuberosity of the ischium is less prominent, and the symphysis pubis is shorter. The femora are thrown to a greater distance from each other, their head has a less extensive articular surface, their cervix is longer and more oblique, and their trochanter major less elevated. The legs, thus removed from each other, afford a broad and secure base of support for the erect trunk, and this is increased by the plantigrade position of the feet, the parallelism and magnitude of the inner toe, —the advanced position of the astragalus, the extension backwards of the calcaneum, the fixed condition of the tarsus, and the strength of the metatarsus and the bones of the toes.

These peculiarities, however, in the skeleton of our species, are not equally developed in all the races, for the negro has the forehead low, the nasal bones less prominent, the nose flat and broad, the muzzle projecting, the incisors inclined forwards, the cranium proportionally small, and the facial angle often below seventy degrees. Even the Mongolians, with a more elevated facial angle of seventy-five degrees, have the nose sunk, the orbits remote, and the malar bones prominent. It is in the European race, where the facial angle is above eighty degrees, that we find all the characters of the skeleton the most remote from those of the orangs, and from those of all the inferior animals.

From the adaptation of all parts of the skeleton of the quadrumana for the inclined position of the trunk, and of man for the erect position, their bones are more easily recognised than those of most other animals, yet not a fragment of either has ever been found in a perfectly fossilized condition. The bones of quadrumana occur abundantly in the recent alluvial deposits along the banks of great rivers in tropical countries, but of species now living in those countries. The bones of our species have often been found in doubtful situations, as in deserted mines, in recent deposits lying in diluvial caves, in the fissures of ancient rocks, in drifted calcareous sands consolidating on sea-coasts, or covered with corals at the bottom of the sea, like this specimen of the tibia covered with *monticulariæ*. Skeletons of our species nearly entire (*Fig.* 118) are often

Fig. 118



found embedded in a solid concretion of comminuted shells and corals now forming along the coasts at Guadaloupe. These skeletons still retain the animal matter of the bones; the embedding particles of the shells and corals retain their colouring matter, and belong to the common species of those coasts.

Now these are all the observations we have leisure to make on the solid parts of animals—the organs of support. And we have seen that nature, in the construction of those solid parts throughout the vertebrated classes, has kept with remarkable constancy to that typical plan which was commenced in the cephalopods by the development of the laminæ of the vertebræ. Since the cartilaginous skeletons of the lowest fishes, we have seen that nature has directed the currents of nutritious matter, conveying the phosphate of lime with other earths, to certain definite points; that those points have remained remarkably constant in their position, whether they were afterwards to be anchylosed together, or to remain permanently detached—that the centres of ossification remained the same. We seek, therefore,

for the theory of this constancy in the plan upon which the skeletons of vertebrated animals are constructed, in the distribution of the nutritious arteries of the bones. In the stages of development of the most perfect skeletons of the vertebrata, we perceive but a repetition of the stages we passed through since we commenced with the cartilaginous fishes. The earthy matter that is employed in this great division of the animal kingdom to consolidate the organs of support, is not the same as that which was employed to consolidate those heavy massive coverings that were thrown for protection over the bodies of molluscous and inferior animals. A much denser material, the phosphate of lime, is here employed to support the great, elevated, durable fabrics of these large animals. But whatever forms these earthy materials may assume, and whether placed in the interior of the soft parts or on their surface, they are still due to the living processes of the system, and are permeated by animal matter; they are normal parts of the structure, intimately connected with the soft parts, and influenced by their contact, and they serve alike to give form, protection, and support, to the whole fabric.

REMARKS ON

DELIRIUM TREMENS,

ITS COMPLICATIONS AND TREATMENT.

By P. Bennett Lucas, *Esq., Surgeon, London.*

This most interesting and singular disease has within the last few years attracted in an especial manner the attention of the profession, and many valuable papers have been dedicated to its consideration in the several medical periodicals. Upon its distinguishing characters all are agreed, but upon the pathology of the affection, and the manner of treating it, a similar unity of sentiment does not exist, and this is the more to be regretted, in consequence of the remedies proposed for its cure being very opposite in their effects. When, for instance, we find some practitioners recommending bleeding, and others violently opposing the use of the lancet under any circumstances; when we find opium recommended, from a moderate to what may be termed an immoderate dose; when the habitual stimulus is liberally supplied on the one hand, and as unceremoniously dismissed upon the other; when restraint is considered as taking away one out of the few chances we have of our patient's recovery, and a straitwaistcoat is resorted to with benefit; when, in short, we read of decided success stated to attend very opposite modes of treatment,—either the disease must have presented itself under very different aspects, or circumstances must have occurred to call for other remedies besides those usually recommended.

A practitioner, for the first time, recognising the disease, and referring to his library for some practical information, would, in consequence of these differences of opinion, feel at least undecided what course to pursue, and did not his own judgment direct the administration of his remedies, he would, in all probability, have little reason to congratulate himself for relying upon the indiscriminate recommendation he fixed on, and so scrupulously adhered to.

Did delirium tremens always present itself in its simple uncomplicated form, its treatment would be reduced within a very small compass, and a sound sleep being its natural cure, all our remedies would be directed to the attainment of that salutary end. But unfortunately this is not the case. In some instances the membranes of the brain are actively inflamed; in others the chest is engaged; in others the stomach and bowels; and it is very seldom indeed that the disease is met with, except in complication with some local or constitutional affection, demanding the omission of remedies considered by some as specifics, and the administration of others very opposite in their characters. The constitution of the patient, the manner in which the disease was induced, and previous habits, will, in general, render the disease more or less manageable, and will influence the determination to various organs. In the habitual tippler, who lives only in excitement, and who solicits the disease by an excess of devotion to his accustomed idol, the stomach and bowels will be the organs found most often implicated; such a patient having, in addition to the characteristic symptoms, nausea, vomiting, pain in the epigastrium, and scanty, slimy, dejections. Under other circumstances, from hereditary predisposition and dissipation, the lungs become the organs engaged; and in one instance of this kind which came under my observation, the patient, after recovering from the disease, died in three weeks of confirmed phthisis. In other cases, a few hours after the disease shows itself, the pulse becomes quick, and loses its soft beat; the pupils become contracted, the eye suffused, the face flushed; the patient gets violent, but is

easily controlled by words. Here the individual will not present a constitution tampered with by habitual intemperance, but one rather of an opposite kind; his state previous to the excess which induced the attack being one of sound health.

So long then as the disease presents itself in combination with these different affections, so long must our remedies vary, and bleeding, opium, stimuli, purgatives, &c., be resorted to with advantage in judicious hands, and under various circumstances. The symptoms of the affection in all its complications are very characteristic, and are never masked. No matter in what constitution it occurs, whether in the weak or robust, whether induced by a continued or a transitory debauch, whether inflammation or congestion be present, the tremor of the hands, the restlessness of body, the wandering eye, the absence of sleep, and the mental delusions, are always present, and these, together with the patient being easily controlled, leave little doubt of the existence of the disease.

Having witnessed in the course of my practice many cases of delirium tremens in its simple and complicated forms, where remedies very opposite in their effects were administered with the happiest results, and having lately had, through the kindness of Mr. Cosgreave, further opportunities afforded me of seeing the disease in the extensive parish of St. Clement's Danes, the surgeoncy to which he so ably fills, and in which parish it is very prevalent, I am emboldened to add my mite to the information already accumulated, with a view of determining those complications which call for opposite methods of treatment; and this I do with the less hesitation, having it in my power to illustrate any opinions I advance, by reference to cases, "which," to use the words of an able surgeon now no more, "may be compared to the representation an artist gives of natural objects, and are only valuable inasmuch as they are correct and vivid delineations of reality."

Before proceeding, however, with this view, it will not be out of course, and certainly not uninteresting, to make a few observations upon the pathology of the disease, for unless clear ideas are entertained upon this head, practice, no matter how successful, bears upon it the stamp of empiricism. In common with those diseases which have their seat in the brain and nervous system, and which are not dependent upon pressure, inflammation, or other obvious causes, morbid anatomy has failed to demonstrate any lesions in these organs, or even the slightest deviation from healthy structure.*

Some years since Mr. Howship stated that the disease was produced by a deficiency in the necessary supplies of nutritious matter to the vascular system, caused by long suspension of the digestive process, and he found in his dissections the blood contained in the vessels, particularly in the veins of the brain, like water, scarcely tinged, and in the arteries pale and thin, from the great deficiency of crassamentum. The volume which contained these observations was entitled "Practical Remarks upon Indigestion, &c.," and when the affection under consideration was included in the work, it was to be expected the disease would be referred to the digestive organs and vascular system.

Although post-mortem examination has contributed little to our knowledge of the nature of delirium tremens, yet another channel presents itself, equally interesting and more practically important, embracing the symptoms of the disease, their exciting causes, and the remedies to which they yield, and these three circumstances appear to me to afford abundant evidence of the brain and nerves, being the organs directly affected, independent of derangements occurring in other parts of the system, which foreign derangements, when present, may always be traced to constitution, temperament, previous habits of life, exposure to cold, injuries, &c., and have nothing to do with producing the disease, but merely exist in company with it, continuing their progress after its symptoms have subsided, and yielding to the various remedies applicable to them. It is the too sudden withdrawal of an habitual stimulus, or a fit of intoxication occurring to an individual unaccustomed to such excesses, which gives rise to the affection. The brain and nervous system are, in the first place, in a high degree of excitement, the stimulus which produced it is suddenly given up, and a lesser degree continues to operate. In all cases of delirium tremens, I look upon this state to exist, and in no instance a diminution of nervous energy to be present.

But in taking this view, it is necessary to observe, that I use the term excitement in reference to the state of health the individual enjoyed previous to his indulging

* A fortnight since I had an opportunity afforded me of examining a patient who died in the workhouse of St. Clement's Danes of puerperal mania, five days after her confinement. There was an evident want of vascularity in the brain and membranes, the choroid plexus was pale, the vense Galeni empty; but not the slightest deviation from healthy structure, or from the natural consistence of the cerebral mass.

in the excesses which gave rise to the disease, for unless this be taken as the standard of comparison, the expression, diminution of nervous energy, would be more applicable, as it is to every state which follows the slightest temporary excitement.

In those cases where patients have not enervated their constitutions by habitual intemperance, a train of symptoms exists demanding depletion before the administration of other remedies, and the withdrawal of stimulants is followed by the happiest results. In the year 1832, when in charge of the cholera hospital at Bantry, Mr. Young, an acute observer and safe practitioner, mentioned to me, that in the majority of his cases he was in the habit of using the lancet with marked advantage, and that they generally were individuals of good constitutions, who brought on the disease by sudden fits of intoxication, such as often take place at country fairs and other meetings, where business is quickly followed by liberal indulgences to Bacchus. An habitual tippler, or worn-down drunkard, will, on the contrary, present symptoms contra-indicating depletion; but such individuals in their healthiest moments have constitutions below par, if I may use the expression, and when attacked with the disease, their pulse acquires a strong beat, additional energy is communicated to their muscular fibre, and their entire demeanour betrays comparative excitement; the disease seems to produce upon their frame the same effects which moderate quantities of intoxicating liquors do upon that of healthy individuals in their convivial moments, with this important difference, that whilst the constitutional powers of the latter possess in themselves sufficient natural energy to restore the equilibrium which the additional excitement disturbed, the former sink into a state approaching collapse, unless the artificial constitutions they by their habits of life have established be kept awake by the accustomed stimulus. It is when this stimulus is withdrawn that such patients betray loss of nervous power; and a similar effect would be produced, whether they laboured under delirium tremens, or were in their ordinary health; and hence, also, when such become the subjects of operation, the surgeon administers wine and opium, knowing that an opposite practice would be attended with fatal consequences.

For these reasons I look upon delirium tremens as a disease of excitement, the intensity of which is modified by the constitution of the individual, requiring treatment accordingly, and that any apparent diminution of nervous energy bears reference to the standard of an artificially excited constitution, and not to the standard of a natural health. The feeblish individual betrays this state when labouring under the disease; his brain is constantly on the alert, and his imaginations are in proportion to the sensibility of that organ; his muscular energy is increased, enabling him to make considerable bodily exertions, such as moving heavy articles of furniture, taking long walks, &c.; and this state continues until the disease proves fatal by convulsion or coma, or until a happier termination is brought about, by nature administering to his excited frame the soothing effects of her own remedy, sleep!

> The innocent sleep!
> Balm of hurt minds, great Nature's second course;
> Chief nourisher of life's feast.

Having extended these observations to a greater length than I originally intended, I shall proceed briefly to class the disease under the following heads, giving cases from my note-book illustrative of each, and reserve for the conclusion a few remarks upon some interesting facts which they present, and upon some rules of practice which I conceive applicable to the disease under every complication.

1. Uncomplicated delirium tremens.
2. Delirium tremens complicated with gastric symptoms.
3. Delirium tremens complicated with hepatitis.
4. Delirium tremens complicated with meningitis.
5. Delirium tremens complicated with phthisis.
6. Modified delirium tremens.

Case 1.—*Uncomplicated Delirium Tremens.*

Feb. 20th. —— King, ætat. 38, habitually intemperate; seven years since had a violent attack of delirium tremens, brought on by drinking, for which he was bled, and got pills. Since then he has had repeated slight attacks, but never of intensity sufficient to call for medical interference. He had been in a state of intoxication all last week, left off drinking two days ago, and on the 19th showed symptoms of the disease.—Present state. Pulse 84; tongue clean; head rather warm. No perspiration; eyes bright; pupils natural; no vascularity of conjunctivæ; tremors of hands and general restlessness; looking suspiciously about; bowels natural; no headach; absence of sleep. Says he was tormented all last night by apparitions, and now speaks of being left money, having important business, &c.

℞ *Opii Purif.* gr. iv; *Camphoræ* gr. xvj. M. Ft. pil. iv equales. Sumat ij statim, et rept. j tertiis horis. To have a pint of porter daily.

21. Left his home immediately after yesterday's visit, and returned at night, after having walked, by his own statement, over twenty miles; took two of the pills, went to bed, and slept soundly for six hours, after which he got up, showed symptoms as before, but was not so violent. Has taken all the medicine; pulse 72; tongue clean; head warm and dry; urine straw-coloured and natural in quantity; is walking about examining the lock of his room door, &c. Says he was tormented all night with bugs in his hair. Tremors have subsided. Cont. pil. j tertiis horis.

22. Took four pills; had a sound sleep until ten o'clock this morning; wishes to remain in bed; quiet; inclined to doze. A profuse perspiration over head and neck. Habt. *Pil. Op. c. Camph.* j, h. s.

23. Slept well last night; is up and convalescent.

℞ *Pil. Hydr.*,
Ext. Col. C., aa gr. xij, in pilulas sex. Sumat ij p. r. n.

CASE 2.—*Delirium Tremens complicated with Gastric Symptoms.*

Jan. 17. Barrett, ætat. 30, a cab driver, has been in the habit of gin drinking for several years, but never had an attack of delirium tremens. Has been subject to bowel affections, and two months since had dysentery, for which he was treated at one of the public dispensaries and cured. On the 16th, after being inebriated for four successive days and exposed to inclemencies of weather, he ceased drinking, and on the afternoon of this day presented the following symptoms:—Tremors of hands; general restlessness of body; hurried speaking; imagines he sees several of his relatives in the room; his attention can be fixed by speaking determinedly to him; countenance pallid; skin clammy; tongue white; pulse 80 and soft; pupils natural; conjunctivæ pale and glassy; urinates freely; bowels moved continually, and the dejections are small in quantity and slimy. Pain upon pressure over the epigastrium and lower part of abdomen.

Habt. *Pil. Op. c. Camph.* No. iij, j; tertiis horis.

18. Has taken the pills; tremors have subsided; he speaks rationally; has had no sleep. When he attempts to doze, is disturbed by unpleasant thoughts, frightful appearances, &c.; great thirst; bowels not moved since this morning skin dry; pain over abdomen continues. Contin. pil. j tertiis horis.

19. Absence of sleep and restlessness the only symptoms present. Contin. pil. ut antea.

20. At six o'clock yesterday evening fell into a sound sleep, and awoke this morning at two; has dozed since, and is perfectly convalescent; bowels not moved.

Ol. Ricini ℥j statim.

21. At his occupation.

CASE 3.—*Delirium Tremens complicated with Gastric Symptoms, occurring in a constitution the reverse of Case* 2.

Harry Jones, æt. 30, a pugilist, has been attending meetings of the *fancy* for the last week, and indulged in gin, brandy, porter, &c., to intoxication. Left off drinking on Thursday evening, and on Friday was attacked with continued retching, and was visited by a medical gentleman, who ordered him purgative pills, and an aperient mixture, which operated three or four times.

Saturday. Complains of pain upon pressure over the lower part of abdomen and epigastrium; tremors; is quiet; has profuse perspirations over head and neck; nausea; can eat nothing; wishes for cold water; urinated once, small in quantity, and high coloured; thinks he sees monkeys, and points to them; addresses himself to Tom Spring, and fancies he is on board ship winding up a windlass; tongue white; pulse 112.

℞ *Calomel.* gr. ij;
Opii Purif. gr. j. M. Ft. pilula. Sumat j 4tis horis.
Stimulants withdrawn.

Sunday. Took four pills; dozed during the night; is inclined to sleep; perspiration continues; pain on pressure less; pulse 96; bowels not moved.

Monday. Slept soundly last night; bowels moved once this morning; tremors have subsided; no pain upon pressing the abdomen; pulse 90.

℞ *Ol. Ricini* ℥i;
Tinct. Opii gutt. xx, h. s. s. Beef tea.

Tuesday. From home.

CASE 4.—*Delirium Tremens complicated with Hepatitis and Jaundice.*

April 1. — Green, æt. 35, a stout healthy man, fell against a table, and received a hurt in his left side; complains of difficulty of breathing, and pain upon pressure; no fracture of ribs; says he is a temperate man, and did not exceed a pint of porter the day of the accident; pulse 96; skin dry; tongue white; bowels costive.

V.S. ad ℥xvj. *Pil. aperient.* ij, h. s.

Bleeding has made no impression upon the pulse, but has relieved the difficulty of breathing.

2. Pills operated eight or nine times; pain in the side continues; had disturbed sleep, and early this morning showed symptoms of delirium tremens. He has now tremors of hands; strange fancies; pulse 80, full. Upon asking his friends, it was ascertained that he had been indulging to inebriation for three days, and ceased drinking the evening of the accident. He is not habitually intemperate. Says he was amongst rats and monkeys all night.

Habt. *Enema Amyli c. Træ. Opii* gutt. xxv, et rept. post horas tres somno absente. Applicat emp. vesicat. lateri.

3. Got two enemata; no sleep; tremors and optical delusions continue; complains of slight cough; face and conjunctivæ of a yellow tinge, the latter particularly so; pain on pressure over the region of the liver.

Rept. enemata. Veal broth.

4. Three enemata were administered without producing rest, or removing any of the symptoms. He talks quick and agitated, and is fearful he will not get money which was left him some time since by a relative; pulse 86; has cramps occasionally in his fingers and legs. Omit enemata.

℞ *Opii Purif.* gr. ij;
Camphoræ gr. viij. M. Ft. pil. ij, et statim sumende, et rept. post horas quatuor somno absente.

5. After taking four pills he went to sleep; is free from tremors and optical delusions; fears he will die, and is reading the Scriptures; conjunctivæ very yellow; pain over region of liver continues; pulse 80; bowels confined.

℞ *Calomelanos* gr. iv;
Pulv. Aloes gr. iv;
Ol. Carui gutt. ij;
Saponis q. s. ft. pil. ij. Sumat j statim et rept. post horas sex ad effectum.

Rept. *Pil. Opii c. Camph.* j, h. s.

6. One pill moved the bowels twice; took the opiate at night, and had a good sleep; pulse 78; pain over liver continues. Veal broth.

7. All symptoms of delirium tremens have subsided; is walking about his room.

Habt. *Pil. Hydr.* gr. xv in pil. tres; sumat j omni nocte.

CASE 5.—*Delirium Tremens complicated with Meningitis.*

Jan. 27. Mr. B., æt. 54, sanguine temperament, and stout habit of body. Three days after a fit of drinking was attacked with tremors of hands and general restlessness; had no sleep last night; face flushed; pulse 120; skin warm; profuse perspiration over head and upper extremities; conjunctivæ red; pupils contracted; speaks hurriedly, and as if frightened; is easily made to remain quiet; promises to do so, but when left alone attempts to get out of bed; fancies he sees monkeys, rats, &c., and thinks his bed is filled with guineas. When asked to show them he catches the tufts of the counterpane, and says, "Look at them." Bowels confined.

V. S. ad ʒxvj;
Habt. *Calomelanos* gr. xx, statim; necnon
Pil. Opii c. Camphor. vj; sumat j tertiis horis.
Stimuli withdrawn.

28. Bowels moved twice; pulse 90; conjunctivæ of a yellowish red hue; pupils contracted; is much quieter, but had no sleep, and is very watchful; tremors continue; talks wildly; hands swollen and vascular. Contin. *Pil. Op. c. Camphora.*

29. Took four pills; had a sound sleep; tremors have subsided; wishes to remain undisturbed; bowels not moved since yesterday; pulse 90.

℞ *Calomel,*
Pulv. Aloes, aa gr. viij;
Ol. Carui gutt. ij;
Saponis q. s. ft. pil. ij, h. s. Broth.

30. Bowels moved once largely; is convalescent.

CASE 6.—*Delirium Tremens complicated with Phthisis.*

M. T., æt. 29, received an extensive cut between his index finger and thumb, and conceiving injuries so situated to be generally followed by lock-jaw, consulted me respecting it. He stated that the wound occurred in a drunken brawl the evening before, and his manner betrayed great nervousness. Having dressed it I desired him to remain quiet, and to dismiss from his mind any idea of its being followed by the consequence he supposed. The next morning I was requested to see him, and found him labouring under delirium tremens. In addition to the symptoms characteristic of the disease, he had a constant cough and purulent expectoration. Under the administration of acetate of morphia and camphor mixture the delirium tremens subsided, but the cough

continued, the sputæ became tinged with blood, he had profuse perspirations, and three weeks after I first saw him he died hectic. Upon inquiring from his friends, it was ascertained he had led a very irregular life, and for the year previous to his death was subject to pain and cough. The daily report of this case I have before me, but its great length induces me to give it in the present form.

CASES 7 & 8.—*Modified Delirium Tremens.*

Whilst doing duty for my friend Dr. Macnamara, at the Cork General Dispensary, a patient presented himself, and stated that a crust of bread had stuck in his throat that morning at breakfast, that he could neither get it up nor down, and came for the purpose of having an instrument passed, such as he saw used some months before in a similar case which occurred to a friend of his. The man told his story so plausibly, that I took a probang and was proceeding to introduce it, when, upon opening his mouth for the purpose, his tongue appeared white and furred, and his breath had the heavy odour so peculiar to drunkards. Upon making further inquiries, he confessed he had been drunk for some days, and had only the day before resumed temperate habits. His face was flushed, his pulse natural, he had no tremors, but was restless, speaking hurriedly, and making continued efforts to swallow the obstructing body. To please him I passed the probang, without meeting any obstruction, gave him some water, of which he drank freely and went away. In a few minutes he returned to have the operation repeated. He was prevailed on to go to bed, and take a draught containing a full dose of laudanum, after which he fell asleep, which effectually removed all his fancies.

Mr. ——, a confirmed drunkard, for the last three years has been the subject of various attacks of delirium tremens. His habitual stimulus is whiskey. When the disease attacked him he always left his home, and consulted several medical men under the supposition that he had contracted gonorrhœa.* He never had tremors, but was very restless; he spoke hurriedly, had a natural pulse, and a pale yellow countenance. I attended him several times, and always succeeded in subduing the disease by the administration of a large opiate, with camphor mixture, and the use of his habitual stimulus in moderation.

Remarks.

The cases just related I have selected from my note-book, and have ventured to class them in the order I have done, for the purpose of contrasting the methods of treatment pursued, and not with the idea that the classification embraces every variety of the disease. Many other complications must necessarily attend delirium tremens, and require suitable treatment; but those I have selected embrace every variety which came under my own observation, and to give the reports of other cases which are lying before me would be a work of supererogation, as they present no new feature, either in symptoms or treatment, and are all referable to one of the above classes.

It is evident that the great desideratum in every variety of treatment is, to procure for the patient a long uninterrupted sleep, and no matter by what means this desirable end is brought about, the symptoms are sure to subside, and the recovery of the patient to be certain. Opium judiciously administered will fulfil this object, but in some cases, unless other remedies precede its exhibition, this powerful medicine will have the very contrary effect, and instead of inducing sleep, will aggravate all the symptoms, particularly the delirium. In those cases where the brain or its membranes become actively engaged, opium should not be given in the first instance. Such patients will bear a large bleeding, and the symptoms will be greatly subdued by such practice. Neither will the administration of the habitual or any other stimulus be attended with good effects; on the contrary, they should be cautiously avoided, for patients labouring under this complication are invariably of a stout constitution, not enervated by tippling, and in general are strangers to the use of intoxicating liquors, except upon occasional revels, when they exceed all bounds. In the habitual tippler, nothing preparatory need be done, but opium administered immediately, and the allowance of stimuli in the proportions he was accustomed to previous to the disease attacking him.

Camphor, in combination, will be found of much benefit, particularly in the latter class of patients, and in those complications where the stomach and intestines are engaged, calomel may be given with advantage. Indeed in almost every complication of the disease this medicine is called for, and may be given in a full dose

* Upon one occasion this patient consulted a young medical pupil, who, taking his word for the existence of gonorrhœa, prescribed six drams of balsam capivi, with the usual directions. Mr. —— supposing, however, that if little would be good the entire would be better, took the contents of the bottle at one dose; it operated upon his bowels several times in the course of a few hours, but was not followed by any bad consequences.

before the exhibition of opium, or in combination with it, for whether the state of the liver which belongs to the dram-drinker he considered, or the very interesting pathological connexion existing between this organ and the brain, when the latter is the subject of disease, calomel must be of benefit in regulating its secretions and rousing the torpidity which attends the organ under such circumstances. Restraint should never be resorted to, but free exercise permitted to the individual, the beneficial effects of which were very evident in the case of King; and where the patient never attempts injury to himself or others, and can be easily controlled by common attention, the use of forcible measures, with a strait-waistcoat, &c. would be worse than cruel. In the last case of the disease which came under my notice, (Case 4, Green,) I was induced to try the effects of anodyne injections in consequence of the very favourable manner in which they have lately been spoken of by Baron Dupuytren in his cases of delirium traumaticum, thinking that a similar plan of treatment would succeed, and I delayed sending this paper to your valuable journal until such an opportunity presented itself. In the case alluded to five enemata were administered without the least benefit; indeed the symptoms were rather increased; in consequence they were laid aside, and opium, in combination with camphor, was given by the mouth, which answered the desired end. This case I saw a few days since, and had to prescribe a continuation of the blue pill, with a mild bitter, the secretions of the liver not being perfectly restored. The patient in other respects is in good health, and at his business.

98, Guildford-street, Russell-square,
April 21st, 1834.

EPIZOOTIC DISEASE IN A PIG,

Similar to that prevailing among Swine during the last Two Years, and somewhat analogous to Malignant Cholera, apparently induced by Contagion from Infected Clothes.

Communicated by JOHN COLVAN, *M.D.*, Licen. of King and Queen's Coll. of Phys. in Ireland, M.R.C.S.L., Phys. Armagh City Fever Hospital, and Armagh Cholera Hosp.

TERENCE QUIN, town-beadle and caretaker of the Armagh Cholera Hospital, states, that on Saturday morning, March 1, 1834, after the admission of Wm. Dillon* into the Cholera Hospital, he threw the clothes of that patient down in the passage where the cot for the conveyance of the patients usually stands, and that having been very busy in another direction, he forgot to remove them until late at night. In the evening he saw a little pig of his, aged about six months, and hitherto "quite stout and well, and a good feeder, rooting among Dillon's clothes." His daughter Biddy also observed the same. Next morning his daughter told him that the pig was not well, as it did not come to its meal as usual at her call. It continued to lie down, and panted very much, having a kind of spasmodic inspiration, and would neither eat nor drink. Next day, Monday, it became *discoloured* about the ears, sides of the face, and throat. The hue was a dark crimson or purplish colour. It lies on either side on which it is placed, breathes very quick, and with a spasmodic catch, and is of a decided purple over its whole surface. It appears stupid, and not easily roused, even by considerable force; takes no meat, and scarcely any drink, and passes neither stools nor urine.* The disease, in every particular, resembles that which has been so prevalent during the two last seasons among the swine, and, in some respects, the form of malignant cholera which has existed among the human species. Quin has two other pigs a little larger and older than this one. All three were fed and treated in every respect alike, but only this one got to the clothes, and this one only is ill; the others are in eat, drink, and sleep, well, and effect all the necessary evacuations with regularity. The sick pig had been six or seven weeks in Quin's possession before it became ill. It may be remarked, that he occasionally gave his pigs a little sulphur in their meat to prevent disorder. He is a man worthy of credit, and ready to testify to the truth of the foregoing statement.

I saw the pig on the third or fourth day, and regularly afterwards. Quin cut one of its ears quite through, but it did not bleed. He also made a deep incision at the root of the tail, which also did not bleed, and he administered injections which brought away a few trifling scyballæ. The animal livid seven days from the first period of its illness. On the day after its death, Sunday, March 2nd, I got a butcher who was conversant with the disease in pigs, to open the body in my presence, and the following were the appearances on inspection. *Externally.*—Ears, sides of the face, hams, and belly, extremely

* A man who died of the most malignant cholera, and very rapidly.

* In the porcine epidemic of last year, dysentery and diarrhœa were among the most prominent symptoms. This year *quite the reverse* is the case.

dark-purple colour. The entire skin also was similarly discoloured, excepting that at the back and sides it appeared to be modified by the hair, on turning up which, however, the colour proved to be as dark as in other places. The carcass was very rigid, and the belly a good deal contracted. *Internal Appearances.*—The fat, on cutting into the abdomen, was reddish. The bladder was contracted, and contained about a wineglassful of turbid urine. Peritoneum of a flesh colour, and the intestines very much contracted, nearly quite empty, injected, and of a crimson colour. The spleen, the butcher said, was rather larger than natural, but in other respects quite sound. Liver of the usual size and colour; gall-bladder not very full of bile, but what it did contain was thick and viscid. The stomach externally did not present an unnatural appearance, but the inner surface was of an orange colour, apparently from bile, and contained a dark-green half-digested-like substance; the rugæ were very large, and of a reddish tinge, particularly at the greater succulus. The heart was dark-coloured, and the auricles were full of dark, coagulated blood. The lungs were of a natural character, but a little whiter than ordinary; they did not appear preternaturally contracted. The pluræ were flesh-coloured, like the peritoneum. I leave others to draw conclusions from the foregoing facts.

Armagh, April 12th, 1834.

BLEEDING IN FEVER.

To the Editor of THE LANCET.

SIR,—As I observe in a recent number of a contemporary publication in London, that Dr. Sutton has put forward his claim for precedence in the practice of "*bleeding in fever*," in reference to the merit of originality on this subject, hitherto yielded to Drs. Clutterbuck, Broussais, and others of modern date,—may I request you will do me the favour to insert this short memorandum in your widely circulated Journal, setting forth in like manner a claim which I make on behalf of my father, formerly surgeon to his Majesty's 14th light dragoons, in whose work, entitled, "Practical Observations on the Treatment of the Nervous, Putrid, or Malignant Fever," published in Dublin in 1800, the practice of bleeding, as he terms it, in *putrid fever*, under certain circumstances, is inculcated in strong terms.

His successful practice in fever, the result of his fearless use of the lancet, was well known throughout the army in Ireland *of fifty years ago*, and I confidently believe, that although he only published *the results of that practice* in 1800, his contemporaries of that period were well aware of its having been no novelty *with him* for many years before.

As it is my intention to republish my father's treatise, together with some observations which I am now arranging on the present typhus fever of this city, I shall conclude with expressing a hope, that you will, in the meantime, assist me in this attempt to render *suum cuique*. While on the subject of *originality*, I shall also prove, that upwards of fifty years ago, my father suggested the expediency of evacuating the aqueous humour, in order to relieve the acute stage of severe ophthalmitis.

Your obedient servant,
G. A. BORTHWICK, M.D.
Durnaway-street, Edinburgh,
22nd April, 1834.

THE LANCET.

London, Saturday, May 3, 1834.

THE difficulties which we anticipated would arise from the discussion, before the Privy Council, of the London University question, have already sprung up to an enormous extent, and—to use a vulgar but an expressive phrase—the engrafting of this question on the more comprehensive subject of medical reform, which is now engaging the best attention of the Committee of the House of Commons, has completely bothered not only several influential members of his Majesty's Privy Council, but several of the more conspicuous members of the Legislature. The confusion thus created may be productive of much temporary inconvenience, but we trust, nevertheless, that the result will be a beneficial one.

Opposed as we always have been to conferring on the University the privilege of granting degrees in medicine, we cannot but regret that this time, of all others, has been chosen, for urging such a claim on the attention of the Government and

the country. We have all along insisted on the impropriety of proceeding in the course of medical reform by that half-inch system of legislation which would amend an inconvenient *detail* of our statutes, and yet leave a ruinous *principle* altogether untouched. The complaints of medical reformers have been directed against *enormities*, and not against trifles.

The University of London being an institution which may be regarded as one of the brilliant monuments of the enlightened times in which we live,—created under the influence of the genial spirit of some of the most renowned men of science and literature to be found in Europe,—it cannot be regarded with an eye of hostility, except by individuals who are wedded to ancient bigotry and prejudice, or by persons whose minds, taking a wider and a higher range, believe that they behold in the proceedings of the Senate some signs of that odious system of exclusiveness and monopoly, which has long rendered the most venerable of our collegiate institutions the objects of animadversion, indignation, and scorn. With the first of these two classes of opponents we shall not condescend to argue. To the gentlemen who constitute the second class, we would state, emphatically, that the University is NOT seeking to obtain an exclusive privilege. The Council and Senate of the University do not ask, that to that institution alone shall be awarded the power of granting degrees in arts, in law, or in medicine. It is not only wrong, therefore, but unjust and indecent, to impute to the professors of the University a desire, on their part, to obtain from the Government the power of exercising an "exclusive privilege." The professors make no such demand, and so far are those eminent gentlemen from contemplating such an act of illiberality and injustice, that in the petition presented by the Council to the Crown, it is prayed that assessors may be appointed by the Government to conduct the examination of the candidates for the degree; and what, we, therefore, ask, if the charter were granted, is to prevent the government from appointing as those assessors or scrutators, the chief persons who constitute the heads of the *other* medical schools of the metropolis? The professors, instead of *dreading* scrutiny, instead of *fearing* competition, solicit that such a regulation may be made; and yet they are accused of desiring to obtain for themselves a privilege which they would *withhold* from the other public schools! The imputation is false and scandalous. Indeed, we know that many of the professors of the University, in seeking to obtain a charter, believe that they are contending for the best interests of the whole of the medical schools of London, and are acting in direct opposition to the interests of the degree-manufacturers in the north.

However, in exculpating the professors from the imputation which has been cast on their motives and conduct, let it not be understood that our opposition to their obtaining from the Crown the power of conferring medical degrees has in the slightest respect abated. From the outset we were hostile to the grant, and we have reason to believe, that the publication of an article in this journal nearly a year since, prevented the agitation of the question during many months, the arguments used on that occasion having induced one of the most influential members of the Government to declare, that for the reasons stated in that medical journal which had always been foremost in defending the interest of the University, it was impossible that the application to the Crown could be successful.

Now is the time for establishing the principles of medical government on a broad, intelligible, just basis. If the present opportunity be lost, it may not

speedily, be restored. Consequently, every friend of medical improvement, every well-wisher to the interests of medical practitioners, should refrain from engaging in any proceeding, without having investigated, without deliberating on, all the circumstances which could interfere with the cultivation of the science of medicine, or impede the application of a knowledge of that science to the wants and necessities of society. Instead, therefore, of creating new interests which would act as so many obstacles to improvement, instead of enacting statutes which would confer partial privileges,—it should be the object of the Legislature to establish a great charter of medical rights, in which the welfare of the community would be best secured, by protecting, without reference to the distinction of titles and practice, the privileges of all the legally-qualified members of the profession.

Most fervently, then, do we hope, that no new law relating to medicine will be enacted, until after the conclusion of the investigation, which is now going forward before the Committee of the House of Commons.

Circumstances induce us to inquire, when Mr. Colles will vacate the chair of surgery in the Irish College of Surgeons, and who it is intended by a certain clique shall succeed him in that lucrative and important situation.

These are questions which are not asked by ourselves alone, but by those who may suspect Mr. Colles of intending to outlive his reputation as a teacher, and by persons who are more immediately concerned in the election of his successor. Is Mr. Colles aware that even his own friends and partizans are beginning to remark, that he has held office long enough for all the legitimate purposes of fame and fortune, and that therefore, on his own account, he should think of a timely abdication, and make known to the rising generation the terms of that clause in his official will, wherein he has nominated the new professor by whom he intends they shall be instructed? Why Mr. Colles should be so cruel as to keep his friends so long in suspence—why he should suffer them to pine with anxiety and expectation—is a question which of course it is impossible for us to answer, but we commiserate their disappointment, and hope that their wishes for intelligence may be speedily consummated. For ourselves, we can at present only hazard conjectures, and indicate the quarter in which they are likely to obtain information. Is his successor to be his brother-in-law, Mr. Harrison?—or his son William, resident surgeon of Stevens's Hospital?—or Mr. Crampton?—or Mr. Carmichael? We do not imagine that either of these gentlemen has the slightest intention of trying to become the fortunate holders of this prize in the professional lottery of the Irish metropolis. Perhaps, however, Mr. L. L. D. Kirby, professor of the practice of physic in the College, would like to be the man, or, possibly, may be able to afford the profession in Dublin some information on the subject? As to the inclinations of Mr. Kirby, we can, of course, know nothing. We are sure, however, that such a hope on his part will not be realized. *Why* not, Mr. Kirby, and a few of his most intimate friends, might readily tell.

On the present occasion, however, we shall ask, how it is, if Mr. Kirby feels himself at liberty to become a candidate for an office which so few individuals in the profession in Ireland could reasonably dispute with him, that he does not contemplate an offer. Are the arms of Mr. Kirby pinioned against such a contest? Has he, in a moment of unguarded ambition, sold his excellent chance, for the

unprofitable vanity of filling that professorial chair in the College of Surgeons in Ireland which was despised by a mountebank? That Mr. KIRBY should allow his proverbial cleverness in matters of this kind to be overreached by a party with whom he had successfully contended for upwards of twenty years, must be matter of surprise. It is equally strange, that in making the sacrifice of a popular private school, the creation of his own hands, to the devouring monopolists in the school of the College of Surgeons, he did not stipulate for something better than the paltry professorship of the practice of physic. We might connect these events with the successorship to the chair of Mr. COLLES, if we knew as many facts connected with the intended appointment as Mr. KIRBY, who we have reason to believe can tell us how matters stand in that nursery of professors, the school of Park Street. His communications with a professor of that school, with respect to the succession, have been frequent, and by this time he must know whether his own *non-interference* in the event of an election would tend to secure the appointment of a gentleman connected with Park-Street school. Mr. KIRBY will be delicate in divulging secrets, but the importunities of those among his acquaintances who are anxious for information on this subject, may succeed in wresting from him facts which should be public to all the world, and to gain that information we have now afforded them an important clue. Let them, then, cause Mr. KIRBY, Mr. CUSACK, of Park-street, and Mr. ABRAHAM COLLES, to be placed before the Medical Committee of the House of Commons, for interrogation relative to the election of Mr. KIRBY to the professorship of the practice of physic, the motives in which it originated, the conditions under which it was granted—in short, as to all the circumstances connected with this unprincipled transaction, and add one link more to the disgusting series which forms the history of medical appointments in Ireland. The disclosures will amply repay the labour of eliciting them. It is possible, indeed, that Mr. KIRBY himself may not be indisposed to the investigation. If he do not sorrow for the public, he at least may regret his own unsatisfactory share in the transaction. He may be not unwilling to expose the manner in which his fetters have been put on,—an agreeable and appropriate prelude, it may be, to casting them altogether off. The temporary confusion of such a denouement being once over, Mr. KIRBY's elasticity of spirit may again return, carry him to the point of action, and place him, a free agent, in the arena of official contention. But to succeed, he must first purify himself from the stains which he has contracted in this secret negotiation, by a public acknowledgment of his offences.

AS SOON as young HAWKINS, of *St. George's Hospital*, saw the questions which we proposed to him respecting the treatment of the unfortunate FISHER, he proceeded, we suspect, to RODERICK MACLEOD, and was at once assured by that worthy that the defence of his conduct in the charity journal should be triumphant. "Bring me," said the

MEDICAL DOGBERRY, "my pen and ink-horn."

VERGES. "We must do it wisely."

MED. DOG. "We will spare for no wit, I warrant you. Here's that shall drive them to a NON-COM."

Accordingly, the unfortunate CÆSAR is made, by the intelligent defence of the hired scribe, as happened with the notorious operator of *Guy's Hospital*, to "anticipate the particulars" of his own operation, about nine months after the event took place. Trifles such as these, however, relating to literary capacity, must be disregarded when it is required of us

to speak of the knowledge and skill of an individual who holds an important office in a public institution.

The statements of Mr. COSTELLO and Mr. HAWKINS are now before the profession, and what do we find? First, from the communication of Mr. COSTELLO; that he had operated on FISHER by means of lithotrity six times, and that after the second operation the man *walked to* Mr. COSTELLO, *and back again, on each occasion on which the other operations were performed;* that he had several stones in his bladder, each of the size of a *pigeon's egg*, which were all destroyed, as is proved by the operation of Mr. HAWKINS, with the exception of *one* of the size of a *hazle nut*; that such was the beneficial result of the lithotritist's exertions, that after only the second operation, poor FISHER, who for two years had been unable to work as a labourer, was *enabled to resume his daily toil.* "His general health," says Mr. COSTELLO, "was restored, and his sufferings had ceased almost altogether when I last saw him;" and Mr. COSTELLO, having directed that he should again be sent for, if FISHER did not void all the fragments of broken-down calculi, concluded, as he did not again hear from the man, that he was effectually and permanently cured. Mr. COSTELLO therefore did not see the man after the autumn of last year, at which period the man was *regularly following his occupation as a labourer.*

Next comes the statement of Mr. HAWKINS, the skilful lithotomist of *St. George's*, and of what does it consist?

He says that FISHER was admitted to the Hospital in June last,—six months after Mr. COSTELLO had left him,—that in attempting to withdraw the stone through the urethra, it was found impossible to make the instrument, having the stone between its blades, pass without violence. An incision was therefore made into the perineum, upon the forceps, which still grasped the calculus. A "small "portion of the prostate was divided, and "the concretion, which was about the "size of a *hazle nut*, removed by the "wound." On the thirteenth day after this operation for the removal of a calculus of the size of a *hazel nut*, the man was *dead.* Immediately after the second operation performed by Mr. COSTELLO at a time when there were several stones in the bladder, each as large as a pigeon's egg, the man was *at work.* The results of the operations are somewhat at variance. Does CÆSAR HAWKINS imagine that the difference does not reflect disgrace on his proceedings? Considering what lithotrity had done for FISHER,—considering what it has achieved for hundreds of other sufferers,—was it not scandalous that the prostate gland of the unfortunate man should be divided in order to liberate a stone no larger than a hazel nut?

When we behold such statements, we blush for the character of English hospital surgeons,—we tremble for the safety of their patients. If CÆSAR HAWKINS be so young and inexperienced that he is incapable of extracting a stone by means of *lithotrity* or *lithotripsy*, why had he not the manliness, the humanity, to apply to an operator who could have relieved the sufferer by a perfectly harmless proceeding, without placing his life in danger by cutting into his urethra and prostate gland?

But it is needless to say more, as it is stated by the operators themselves, that FISHER recovered his health, and returned to his work, after four successful operations of lithotrity, whereas in thirteen days after one cutting operation, performed by Mr. HAWKINS for the removal of a calculus not larger than a hazle-nut, the unfortunate man had ceased to exist.

WE have received a letter from Mr. DERMOTT on the subject of "a petition to Parliament, entrusted to his care," praying the Legislature for the adoption of the *concours* in the election of medical officers to public institutions. In the course of his letter, Mr. DERMOTT says—

"You have lately expressed an opinion more than once, that such petitions at this juncture would be ill-timed, and, for aught I know, an immediate allusion might have been made to this identical petition. I beg to observe that I do not coincide with you as to the impropriety of presenting a petition at this time regarding such a

fundamental point of inquiry. This may be in consequence of my stupidity, or it may not. Petitions are evidence, and it is on this account that they are officially transferred to the Committee, or, at all events, they afford just ground for inquiry; they are, therefore, when clearly and concisely expressed, of great assistance to the Committee, and not an embarrassment. On these accounts they should be sent in before the inquiry, not afterwards, when they can be of little or no comparative use. The mode of electing officers forms a fundamental part of the regeneration of our institutions, because they can be made strictly responsible persons. It is, therefore, not a thing of mere minute detail, as you have sometimes insinuated." Mr. Dermott adds, "I consider my conduct regarding this, in every iota, justified, notwithstanding your indirect animadversions."

Mr. DERMOTT greatly misjudges if he imagines that we have animadverted on any portion of his conduct with respect to the petition in question. A correspondent had requested that we would ask what had become of the petition, and, as a matter of course, we complied with his wish. Mr. DERMOTT has answered the question satisfactorily in a previous part of the letter from which the foregoing is an extract, by stating that it was presented by Mr. WARBURTON to the House of Commons, and was referred by that assembly to the Medical Committee. We certainly thought the presentation of such a petition at this moment, ill-timed, and we are of that opinion still, because if ever there was a period at which the *concours* question should not be agitated, it is while the Legislature is benevolently occupied in resolving on measures which shall prevent a single unqualified physician from practising in this kingdom. Unless Mr. DERMOTT and the gentlemen with whom he is acting are afraid to leave the decision of the *concours* to the members of the profession, they certainly ought not to select the present opportunity for pressing the question on the attention of Parliament. Besides, it should be borne in mind, that although a *concours* may prove, most indisputably, which candidate, amongst several, is best qualified for the office of public instructor, where the information is to be conveyed in set oral addresses, it is impossible by any such mental struggle as the *concours* would involve, to prove who would be best qualified to discharge the duties of physician to a medical institution. A *concours*, in such a case as the latter, to enable it to prove anything, must embrace a period of months, if not of years. It is expedient, however, that the discussion of the question of the *concours* should be reserved by us for a future day, when it must be fully determined in all its bearings.

Mr. C. BRIDEN, district-surgeon of St. Matthew's, Bethnal-Green, has addressed to us the following statement and remarks, expressing a hope "that the subject of his complaint will obtain the attention of the Parliamentary Committee." He says,

"I was lately passing over a bridge in the Hackney-road, when I saw some men carrying a body which had just been taken out of the water. From motives of humanity I entered the house into which the body was carried; and used every effort for two hours to restore animation, unfortunately without effect. The time and trouble thus expended I freely gave; but when I was summoned to a coroner's inquest, three miles from my own house, and at an hour in which professional men are most engaged, three o'clock in the afternoon, I was surprised, on demanding my fee, at being told that the parish of St. John, Hackney, allowed nothing to medical witnesses, and my astonishment was complete when Mr. BAKER, the coroner, informed me, that he had the power of forcing me to give my evidence, but had no power of compelling a parish to pay me for it.

"How is it possible that the public can expect medical men to dedicate their time and talents towards restoring those who are apparently drowned, when they may have, as in my case, to make a walk of six miles, and suffer an absence of four hours from their practice, without reward for their services?"

On this subject we can only observe, that when a coroner's bill, founded on the principles of public justice and expediency, is brought before the legislature, provision will be made for the proper remuneration of those gentlemen who may be required to attend as medical witnesses at coroners' inquests. Until that time arrives, the profession, we suppose, must submit, but

not, we trust, without complaining, to a most unjust tax on their time, patience, and talents. Should a new law be introduced at an early period, for remodelling the medical constitution of this country, it may not be necessary, in order to remedy the grievance of which Mr. BRIDEN and thousands of other practitioners complain, to wait for the introduction of a coroner's bill, as a medical Act may contain all that is necessary to secure the rights of the medical public.

INTERCEPTED LETTER.

[THE PARLIAMENTARY COMMITTEE.]

"DEAR DOCTOR SEYMOUR,—In my last communication to you I endeavoured to point out, and I trust distinctly succeeded in showing, the line which the Fellows must all follow in their examinations before the Committee. I am very anxious to impress upon them the necessity of not yielding an inch of ground. The loss of even one stone will make some fabrics tumble to pieces. Let me recapitulate a little.

"Remember to state that the superiority of, and preference given to, the graduates of the English universities depend entirely on their moral demeanour and classical education. State boldly that Fellows have no advantages of any kind beyond those of the Licentiates. State *as a fact* that no Licentiate was ever refused a fellowship who had shown *pre-eminent* talent, and after he had undergone a ten years' moral probation. Remember that whenever we have deviated from or suspended any by-law, as in the case of the Archbishop's Doctor, his very avocations were sufficient sureties to us of his moral habits and chaste propensities. 'Who trades in spice, ne'er tastes it.'

"The point on which I shall now speak is our examinations. It will have an excellent effect on the minds of the Committee, many of whom are liberals, for us to state, as we can do with perfect truth, that in order to become a Fellow of the College, it is quite unnecessary to pass through any curriculum of study. We require no certificates of attendance on classes. None of OUR examiners are teachers. It is not necessary for our men to have attended any hospital, far less one with a certain number of beds. We care not when or where a candidate has got his knowledge, if he can only pay the College fees. There is a liberality in these things with us, which is very different from the system pursued by the College of Surgeons, and we are bound in duty to ourselves to take this opportunity of contrasting the regulations of the two Colleges. It is the guiding line of policy at Surgeons Hall to make money. It is ours to cultivate high moral feelings. We shall now have the advantage of our system—the College of Surgeons will have the disadvantage of theirs, and it may prove a millstone to them. Yet so blinded are they to self-interest, that I am convinced Sir ASTLEY thinks the constitution of that corporation a specimen of collegiate perfection. However, considering the large sums of money which the regulations of the Council have enabled him and his relatives to make, it is not so bad an opinion of the worthy baronet.

"The next point for our consideration is the *divisions* of the profession. It will require some nicety, I can assure you, to show satisfactorily in what its divisions consist, and what are their advantages to the public. It is, in fact, a matter so hard to advise on, that I believe our answers must be left to the spur of the moment, when, no doubt, many happy thoughts will arise to relieve us from difficulty. We may safely admit that medicine, as a science, is one and indivisible; but so you know, to offer a common illustration, is a cricket-ball, yet there must be batters and bowlers and catchers and scorers in a game, or how could the ball be played with? Now medicine is the ball which *we* cast about, chucking it from one to the other, and if there were not general practitioners to throw the medical ball up to the pure bowlers and pure batters for the bowlers to bowl to, and medical corporators to score the notches, how could the ball circulate in a scientific way? The public, in short, never could have the game of medicine played at all if there were not proper classes of persons to perform it.

"We may be asked for a table of pure medical and surgical diseases, and we may even be asked by some of the non-professional committee (misled by the divisions of the profession) for a table of "general-practitioner diseases." Be sure that none of you laugh at such a question. The utmost dignity of manner is demanded of all men of high moral feeling. Let Dr. PARIS classify the diseases. He can do it to a shade. The Committee none of them understand medicine, and therefore a list

of *external* and *internal* diseases, fit to meet their eye, may easily be prepared. Mind, however, that all diseases of the skin go *outside*, because the ranking of them amongst the *ins* may, from their *palpable* situation, lead to awkward questions, even from ignorant examiners.

"Something, no doubt, will be asked us about the admission of midwives. With regard to this, I shall say our arrangement is a matter of *taste*. We do not see that it is expedient to admit accoucheurs on the score of *usefulness*, and we do not choose to admit them on any other score. Why should we throw anything like discredit on the men who have been educated at the universities? Men who have taken time to improve their *minds* by literary and scientific acquirements, ought not to be required to mix it up with the *manual* labour of midwifery. It would disparage the highest grade of the profession to let them engage in a branch which requires manual operations of this kind. I even consider auscultation as too manual an act for Fellows of the College. As to a *knowledge* of the diseases of women and children, it is expected of us that we should be, and we hope we are, thoroughly informed upon them, but they are quite separate from obstetric knowledge. It will require caution in giving a reason for our permitting the Licentiates to practise midwifery, but our object must be to show that Fellows and Licentiates are distinctly different classes of beings, and that the latter may do, without degradation, many things which the former, as men of high moral feeling, must not even *think* of. In fact, I shall plainly say, that we not only do not object to Licentiates practising midwifery, but that we are very glad for them to do so. But the strange things the midwives must see, the strange things they must do, and the strange things they must be mixed up with, God knows are not proper things for medical graduates of Oxford and Cambridge to witness, or undergo. I shiver on thinking of them. The pure moral feeling of Fellows of the College must shrink from such risks of contamination as the licentiates suffer. There is but one source of regret attending our regulations, and that is the loss of the practice—I mean its rewards. These extra jobs form, I have always understood, the most lucrative items in the practice of the Licentiates. Especially too, when matters are required to be kept snug. On such occasions the accoucheur is always particularly well paid, and gets a firm hold ever after of the parties. If he be an honourable man, and I believe some of them to be the most respectable members of the profession, no improper use is made of the secrets which are unavoidably entrusted to him, but I have known some instances which convince me that they are not always worthy of confidence, and to dignify any such persons with the Fellowship would, therefore, tarnish the high moral character of our college. One deplorable instance of this kind I never can forget, though it occurred some twenty years ago. The celebrated actor in the drama has long relinquished the medical profession, afterwards obtaining a most lucrative invisible influence over an illustrious personage now no more. A married lady, by some unaccountable accident, as the Duke would say, found herself *enceinte* during the protracted absence of her husband, but the whole matter was very quietly and comfortably arranged by the accoucheur Knight. She was a lady of exalted rank, and the father of the interesting infant also was of high rank, and deservedly a favourite at court. The accoucheur was always a great speculator in the funds, and whether he had really been losing money or not by them, he pleaded poverty, and so alarmed his patient as to get her to induce the papa to lend him a thousand pounds, which was not repaid for years afterwards, and never was intended to be paid, and never would have been, had not a noble Peer stepped forward on the occasion, and got the money back again. I could not, however, venture to state a case of this kind before the committee, though such a flagrant example of depravity would be an incontrovertible proof of the salutary operation of our by-laws, and of the necessity of a ten years' moral probation before admitting licentiates to the Fellowship.

"Yours, with truth,

"London, March, 1834."

ELECTION OF AN ASSISTANT SURGEON TO THE WESTMINSTER HOSPITAL.

To the Editor of THE LANCET.

SIR,—I was much surprised on observing in two recent numbers of your valuable Journal, paragraphs referring, injuriously as regards Mr. Hale Thomson, to the late election of an assistant surgeon at the Westminster Hospital. Convinced, from a long acquaintance with the principles of THE LANCET, that nothing can be more repugnant to its scope and intention than the infliction of injustice on any man, I feel assured that the comments to which

I allude arose from ex-parte information, and that you would not willingly open its pages to statements which have not for their object the development of truth. In the paragraphs which have attracted my attention, two main charges are, if not broadly stated, at least unequivocally insinuated, against Mr. Thomson. The first refers to an event which occurred some years ago, and to which consequently it is difficult to allude with propriety at the present time. In reply to misrepresentations, however, which have recently been industriously circulated, I conceive myself authorized to state, as regards the meeting between Dr. Forbes and Mr. Thomson, that the point of dispute referred solely to the principals; that Mr. Thomson, far from obtruding himself into the quarrel of another, was entirely influenced by the force of circumstances which he could not control, and which no person could regret more than himself. All the particulars of the transaction are known to several professional men of high character, who will bear me out in the assertion that Mr. Thomson's conduct throughout was distinguished by the most perfect honour and humanity. I feel convinced therefore that on a consideration of the subject you will exonerate him from the censure which has been so unjustly applied to him.

The second accusation against Mr. Thomson is, that his election has been secured by the influence of the Treasurer, from family motives. It is easy to prove this assertion to be unfounded, by a reference to facts sufficiently notorious. Mr. Thomson became a candidate for his present office as early as 1827, and then resigned in favour of Mr. Harding, reserving his claims for a future occasion. In 1830 he again came forward on the retirement of Mr. Harding, and was opposed by Mr. W. B. Lynn, when he polled 75 votes against Mr. Lynn's 85. It is a positive fact, that the Treasurer's interest was pledged to Mr. Thomson before any personal intimacy existed between them, and was obtained through the interference of those governors who have taken the deepest interest in the charity. It is obvious therefore that it was on public grounds alone that Mr. Thomson received the support of so large a majority of the friends of the Institution.

As an officer long attached to the charity, I can assure you from personal knowledge, that the real cause of Mr. Thomson's election is not to be found in any corrupt influence whatever, but is due to the just esteem which his independent and public-spirited conduct as a governor had raised in the minds of the trustees at large, by whose united exertions he has been appointed. I have the honour to be, Sir, your obedient servant,

D. O. EDWARDS.

5, Marlborough Place, Walworth,
30 April, 1834.

*** The perusal of the foregoing letter has afforded us sincere satisfaction, and we insert this communication from our esteemed correspondent, Mr. EDWARDS, with much pleasure, because the statements which that gentleman here makes, enable us to remove from the minds of our readers an unfavourable impression with regard to the election of Mr. THOMSON, which might have been established by some statements previously made in the pages of this Journal. Nor is this explanation due to Mr. THOMSON alone; for in attributing the election of that gentleman to the family connexion and official influence of the Treasurer, we were, in reality, attributing unworthy motives to those Governors who constituted the majority of independent electors in the late contest. Until we received the letter of Mr. EDWARDS, we were not aware that Mr. THOMSON was a candidate for the office of assistant-surgeon at the Westminster Hospital in 1827, or that at the subsequent election he had received the disinterested support of the Treasurer and his friends.

THE CHARTER SOUGHT FOR BY THE UNIVERSITY OF LONDON.

To the Editor of THE LANCET.

SIR,—I have read with peculiar feelings your leading article of this day in reference to A CHARTER TO THE LONDON UNIVERSITY. There are views in that article which show most satisfactorily that Thomas Wakley's spirit indited them: but there are other views which I did not expect from the Editor of THE LANCET, the enlightened abolitionist of the exclusive principle.

The point discussed is *the granting of a charter to the London University with power of conferring*, first, *medical*, and second, *other degrees*.

It has been stated all along, and was reiterated last Saturday evening at the

Westminster Medical Society, that the University did not wish to have the power of conferring medical degrees, and yet, it appears, they have asked for this power.

Individuals oppose this. The motives of some are too apparent. The private* lecturers, and among them *myself*, oppose it: and these lecturers, THE LANCET states, "being recognised by the examining bodies, are monopolists in *their* way." But, if they are, who made them so? Did the private teachers make themselves monopolists? Did they apply to the examining bodies to have the privilege of lecturing confined to them, and to be withheld from others? But the privilege of lecturing is not confined to them. The field is open, as a reference to the regulations of the Apothecaries' Company will establish. It is true there are barriers in the way; but these barriers were not the creation of the private lecturers.

Again, it is stated, that "a feeling of selfishness" has been the origin of the opposition of the opposers of this *degree-conferring power* sought by the University. This word "selfishness" is an ugly word. Let us analyse it. Is selfishness in itself bad? No. Selfishness is bad only when it operates to the injury of another. We are taught to love our neighbour as *ourselves*. The love of self is a recognised principle of human nature. It is because the abuses arising from self-love are so apparent that we are led to attach something odious to selfishness. Whereas, selfishness is the rule *by* which we are to be guided; it is to detect anything opposed to our well-being. To illustrate:—In this country we have a certain privilege called the *habeas corpus*. A base ministry, we will suppose, bring a bill into Parliament to suspend this privilege. We petition, we protest against this attempt upon our liberties. Is it not selfishness that awakens our opposition? Is this selfishness to be despised; and what should we think of any member of the Government who should say, "True, they oppose, but it is their selfishness."

If the *private* lecturers were wishing to place the University lecturers under any *disadvantages*, then there would be reason for the cry of selfishness in the bad sense. This they do not wish. They want for themselves and for the University lecturers (themselves really private lecturers), *similarity of privilege*. They want, in running the race of medical teaching, to start under the same circumstances, and to have no jockeying tricks, so that one may thereby get to the goal soonest. "Fair play" and an "open field" is all that *the private* lecturers demand. They ask no *favours* for *themselves*; they demand that no favours shall be given to *others*.

But, Sir, the selfishness is all on the other side. The selfishness is on the side of the University which lays claim to these favours; which says, we are not content with giving to the lecturers of our establishment all the advantages of the delusive and fascinating name of *University lecturers*; we are not content with giving to these lecturers a *splendid building* in which to lecture; we are not content with expending large sums of money so as to give the lecturers of our establishment all the advantages and the dazzling seductiveness of splendid *apparatuses* with which to illustrate their lectures; thus, in all these points of view giving them advantages which no private lecturer, however rich, can possess to the same extent; but we will have a power conferred on our lecturers of *conferring degrees* upon *their* students. Ask any honest man whether this is not disgraceful selfishness.

It is unjust to taunt private lecturers with selfishness in the bad sense of the word, because, when they see such selfishness rearing its hideous head, they try to crush the monster. I repeat it is unjust to taunt men with selfishness, when all they demand is "fair play" and an "open field" for the exercise of their talents.

To confer upon any body of teachers the peculiar privilege required is an INJUSTICE: it is an injurious manifestation of the exclusive principle; and the Editor of THE LANCET is too just and too clear-headed ever to believe that *that* which is *unjust* can be *beneficial*. And hence it is easy to answer the question you propose, "Is it of importance to the community that the University should enjoy the privilege of granting degrees under a charter conferred by the Crown?"

You agree, Sir, that the public could not be benefited by the degree-conferring power as the University is *now* constituted; and I beg to add, that the University can *never be so constituted* as to render the degree-conferring power beneficial. The proof is easy.

This word "degree" seems to be a very mysterious word. Strip it of its mystery, and it is found to be a *sign* of something. As an example, let the title of "Doctor in Medicine" be taken. This means, that its possessor is (or ought to be) *learned in medicine*. If a man is learned in medicine, surely he ought to be permitted to *practise* medicine; the possession of the degree ought to be the *qualifying power* to prac-

* By private lecturers I understand lecturers at private schools.

tise. (I refer to the degree properly conferred.) But no, say the Council of the London University, we do not want this—we want that the "examinations for conferring degrees should be entirely separate and distinct from the examinations for granting a license to practise."

But why? If the examination *for the degree* ascertains that a man is qualified to practise by his being learned in medicine, what more can any additional examination develop? If the examination for the degree does ascertain that the candidate is learned in medicine, (and we must suppose that it will be so at the London University,) it is an insult to him, it is a work of supererogation to others, to be subject to another examination. Let there be *one Faculty of Medicine*, elected by the whole medical profession, which, having tested publickly the capabilities of the candidate, and having ascertained that he is learned in medicine, shall have the power of conferring on such candidate a *medical degree*, which degree shall be his authority to *practise medicine*.

This power cannot, must not, be conferred upon the teachers of an University. It would create a monopoly. For what then does the University want to confer degrees? To confer mere *honorary titles*? But what benefit will the public gain by the bestowal of *honorary titles*? The public want to be protected against *ignorant* practitioners. Will the degree conferred by the University do this? No, say the Council, because before a man is qualified to practise, we hold he should pass another examination for the license to practise. But what does common sense say to this two-fold examination? This, that if the degree be worth anything, it is so as indicating that the possessor is qualified. What need then of another examination? We do not want to be subjected to the additional expense of our sons passing two examining boards; and we at the same time maintain, that if our sons are learned in medicine, they are entitled to degrees of Doctors in Medicine. Either the degree is a *delusion*, or it is an *indication of qualification*; and if so, why should it not be a qualifying power to practise?

The question occurs, why should the University have put forward the necessity of *two* examinations? The exclusive principle will explain. It is apparent that the University could never obtain the power of giving licenses to practise medicine: they knew this; and perceiving that if the body or faculty that confers *the power to practise* has the power of conferring *degrees* (*signs* that the persons on whom the same are conferred are qualified to practise, being learned in surgery and medicine), then the monopoly of conferring medical degrees for which the University prays could have no existence. Well may the Council wish that the examinations for degrees be distinct from the examinations to qualify for practice.

In regard to the power sought of conferring other degrees, which you allow as even right to be granted, I think the same power would be injurious. But the discussion of this, perhaps, you will allow me to postpone to the next week. Believe me yours in well-wishing,

JOHN EPPS, M.D.

89, Great Russell-street, April 26, 1834.

*** In offering some remarks on a petition against the grant of a charter to the *University of London*, which has been presented to the Privy Council by the lecturers of the medical schools of London, we shall embrace the opportunity of noticing two or three passages in the above letter. Dr. EPPS cannot be otherwise than assured that we are not less hostile than himself to any grant which would give the University the power of conferring medical degrees. If the language we have employed can lead to any other inference, we have been very unfortunate in the choice of those terms by which we endeavoured to express our thoughts.

PROSECUTION BY THE

APOTHECARIES' COMPANY.

(*From a Correspondent in Yorkshire.*)

I BEG leave to draw attention to the following paragraph, extracted from the *Leeds Mercury* of April 12th, 1834:—

"*Rejoicing at Hutton-Rudley* (North Riding of Yorkshire).—On Monday the 31st of March, Mr. John Macfarlane, surgeon, returned, after an absence of three weeks, from London, where he had been compelled to go in consequence of an information laid by a rival member in the profession, for not being duly qualified to practise. He passed a regular examination at Edinburgh many years since; but, according to an existing statute, that is not deemed sufficient. Notwithstanding this defect, he had gained great popularity by his medical skill and general moral conduct, and his friends were desirous of showing on this occasion how highly they esteemed him. Accordingly, nearly the whole of the gentlemen, farmers, and trades-

men, residing in the villages many miles around, proceeded on horseback to the *Tontine Inn* (distant seven miles) to meet him on his return, and were there joined by hundreds on foot. On arriving at the top of Patto-lane, about a quarter of a mile from the village of Hutton, they were joined by upwards of one thousand persons greeting with cheers; the horses were there taken from the chaise, and Mr. Macfarlane was drawn round the town, and thence to his residence, by the populace. At four o'clock upwards of two hundred of his friends sat down to a sumptuous dinner, in commemoration of their respect for Mr. M. It is scarcely necessary to add, that Mr. Macfarlane passed the examination of the Apothecaries' Company with considerable credit."

Mr. Macfarlane, the gentleman above alluded to, is a licentiate of the Royal College of Surgeons of Edinburgh, and the feeling thus expressed in his favour in his own neighbourhood is a proof of his estimable qualities. With as good a private character, and a more regular medical education, than all the Wheelers, the Ridouts, the Tegarts, and the other shining lights amongst the Blackfriars fraternity, decency should have whispered to those worthies to hesitate ere they disturbed either the repose of Mr. Macfarlane, or the peace of Hutton-Rudley. But character or education is no defence against the attacks of the Apothecaries' Company, and there is no reason *in law*, as they express it, why those qualifications should protect any man who does not possess their "license." It is worthy of remark, that Mr. Macfarlane was admitted for examination *on the strength of his Edinburgh diploma, and the proof of the five years indenture was dispensed with.* What do they mean by thus, at the twelfth hour, remitting a most material part of what they consider the most perfect of laws, insisting on the indenture in some cases, and overlooking it in others? They profess that the law is *unalterable*, and its administration most *honest*! Their conduct seems guided by the *new virtue* which has sprung up amongst the medical corruptionists, and which has been designated in THE LANCET by the misnomer of "high moral feeling."

The apothecaries went to work with Mr. M. in their usual harsh and unfeeling manner. On one day their impertinent threatening circular was received, and on the following a copy of a writ or bill of declaration in the Court of King's Bench was forwarded, thus allowing no time for an arrangement to save expense and litigation. But the law agent of the Company, when he had once fairly fastened on his victim, took good care to suck him well. Poor Bacot was a dreadful bug-bear to all Scotch diplomatists. Destiny, and not choice, may have cast him amongst the lees of mankind. *Requiesce in pacem.* THE LANCET has bepraised his domestic virtues. His death was too appalling and pitiable to allow me to say more of him. At the present crisis, however, it was particularly unfortunate, as he was privy to so many facts of extortion and oppression on the part of his employers, that his evidence would have been invaluable to the cause of medical reform before the Parliamentary Committee.

April 23rd, 1834.

THE LONDON APOTHECARIES' COMPANY AND SCOTCH STUDENTS.

To the Editor of THE LANCET.

SIR,—I am not apt to rejoice in the downfall of others, nor am I one who would heedlessly cause an unnecessary pang in the bosom of any one; but when such repeated acts of *illiberality* are manifested in the medical profession as are shown in the sequel of this letter, I think it becomes the duty of every honest man to set his shoulder to the wheel, and assist to rectify such open abuses. For this purpose I now trespass on your columns.

It is probably, Sir, still fresh in your memory, as well as that of your readers, that eleven young men presented themselves on the 3rd instant for examination at Apothecaries' Hall, and that out of this number *nine* were rejected, five of whom held diplomas from different universities in Scotland,—young men not only well informed in the different branches of medical education, but some of them even of acknowledged literary talent. Nine, I say, were actually turned back for a further study of six months! Is such conduct to be borne without its justice being strictly investigated?

Some of your numerous readers are no doubt well acquainted with the trick queries and "catch questions" of this worshipful body. One young man out of the nine, who possessed rather more presence of mind than the rest, and who had commenced his studies previously to the regulation of 1831, requiring young men to study Gregory and Celsus, said, on extracts from those books being laid before him, that "he wished the two classic authors well, but had no occasion for examination in them, as he commenced studying prior to the regulation." This for a

time the Examiners argued was not to the point, and black looks and high words were exchanged, but to no effect. The student persevered, and at length succeeded in getting the authors laid aside, and his examination was proceeded with A rare examination it was! One Examiner, deviating from the questions in point, asked him, "if the Scottish students in general were not considered bad classics?" He said, "No, but on the contrary, very good ones. "Then, Sir," said a second (taking snuff), I presume you are an exception to the general rule!" Whilst a third remarked (who sat at a little distance, with his arms over the chair of another), "I should imagine, Sir, by the way of your answering questions, that you never knew what a school was," at which piece of impudence the student expressed his opinion of the want of courtesy shown to the Scotch students generally, and dared the Examiner again to repeat his ungentlemanly remark at his peril. The bustle this circumstance occasioned was great. The President called to order, but long it was before order was restored. Some of the more reflective men in the room argued in favour of the student, who quitted the place in disgust.

Such, Sir, is the behaviour of the Examiners at the Hall towards candidates who have studied in Scotland. If the Apothecaries suppose, that by rejecting so many young men, at a time when the senators of the country are inquiring into their secrets, and suppose that by frequent rejections they will now blind the Parliamentary Committee, they will be mistaken, for "In this parliament there will be a terrible blow!"

I am, Sir, your very obedient servant,

WM. ANDREW, Surgeon.

Mansfield, Notts, 21st April, 1834.

GUY'S HOSPITAL.

ON Tuesday last, Mr. KEY removed three tumours, two of which were of a soft, fatty texture. The first was situated partly on and a little above the anterior superior spinous process of the ilium in a woman apparently of good constitution. The second was on the back part of the shoulder, extending from the anterior edge of the trapezius muscle, nearly to the inferior edge of the twisted portion of the latissimus dorsi, also occurring in a woman. The third, which was of a malignant character, was situated on the anterior and lateral part of the neck, between the sterno-cleido-mastoideus and the trapezius muscles, which, after a little tedious dissection, was removed without difficulty. The man in whom it was situated had a scrofulous appearance.

A boy, of about four years of age, was also brought into the theatre, and sounded for stone, which, however, Mr. KEY was unable to detect. This is the third case of stone which has been brought in for operation within the last ten days,—one of them a case of Mr. MORGAN, and the other of Mr. BRANSBY COOPER; neither party being able to detect the existence of a calculus when on the point of cutting the unfortunate patients.

ST. THOMAS'S HOSPITAL.

DISEASED ANKLE-JOINT FROM CARIES OF THE OS CALCIS.—AMPUTATION.—DEATH.

ON Friday, the 19th, at the usual hour, a man of scrofulous diathesis, aged 33, was brought into the operating theatre for amputation of the leg, for extensive disease of the bone and joint. According to the statement of the patient, the disease originated five years since, from the penetration of a nail into the under part of the os calcis. The wound, after causing much inconvenience and pain, healed in the course of a few months, but merely superficially, and has repeatedly since given rise to small abscesses, which have been a continual source of torment to him. Sinuses in different directions have formed, but by them the extent of disease cannot be ascertained. It is now a fortnight since he was admitted. He states that he is a navigator, and has habituated himself to gin drinking. Mr. TRAVERS, after many careful examinations, finding the extent of disease great, recommended the removal of the limb, to which the patient consented.

Operation.—The operator commenced with the circular incision, about the lower part of the upper third of the leg, dissected up the integumentary coverings, and then, with two or three incisions, cleared the way to the tibia and fibula, and after dividing the inter-osseous ligament, divided those bones. The vessels were secured, and the stump was dressed in the ordinary manner. On examination of the part after amputation, the diagnosis of the operator was verified by the disclosure of extensive disease of the joint, and a carious state of the os calcis, the internal lateral ligament being entirely destroyed.

For the first few days after the opera-

tion the parts appeared to be uniting by the first intention. The man's health continued apparently good; he only complained of slight pain when the stump was dressed. Eight days after the operation he seemed somewhat delirious; however, he said, that he suffered from no pain. The delirium continued, and became much worse. On the 9th day (Sunday) his pulse was small and weak, and in the course of the evening he died, without any manifest cause.

Autopsy.—Eight hours after, the body and stump were examined, in the presence of Mr. TRAVERS and some pupils. Several granulations had formed. The stump appeared healthy; the vessels had become obliterated, and the ligatures had nearly sloughed away. There were strong adhesions of the pleuræ, of long standing, and several indications of a tuberculous deposition in the lungs. The liver was greatly enlarged, of a light clay colour, much firmer than natural, and of a true nutmeg character. Very little secretion in the gall-bladder; the contents of a milky aspect, being principally the mucus of the gall-bladder. Several inflammatory marks were seen on the inner surface of the stomach. There were, also, near the pyloric extremity, three large deep ulcers, which had nearly penetrated through the three coats of this organ. Several other small ulcers were situated in the mucous membrane, but the remainder of the alimentary canal and viscera was healthy.

ST. GEORGE'S HOSPITAL.

DELIRIUM TREMENS.

JOSEPH FORSTER, æt. 31, was admitted into Oxford ward on the 4th of February, in consequence of an attack of delirium tremens. He states, that a few days since he struck the sole of his foot against the step of a carriage whilst unloading it. The pain and the immediate effects following it were so severe, that he was not able to stand or walk. On reaching home he went to bed, where he remained for some days, living on very low diet, and applying a cold evaporating lotion to the foot. Up to the period of the injury he had always been a remarkably free liver, taking large quantities of beer and spirits every day. Hence about two nights since he suffered great nervous excitement, and manifest delirium. These increased so much that it was thought necessary to bring him to the hospital, which he entered in a state of excessive irritation, talking wildly, and shaking and trembling violently, presenting, in short, all the symptoms of delirium tremens. Pulse rapid and weak; tongue white and furred; countenance anxious.

℞ *Ammon. Carbon.* gr. viij;
Liq. Opii Sedativ. ɱ xv;
Mist. Camphor. ʒ iss; statim sumend. et quartis horis repetend.
Gin ʒiv. *Beef Tea* 0j.

Up to the evening no change. The pulse still quick and the tongue dry. *Cont. Haust.; Gin* ʒiv.

5. Eleven a.m. Still as restless, and no sleep yet; pulse quick and rapid; his violent motions prevented us from counting them; tongue furred; bowels open.

℞ *Calomel.* gr. iv. *Pulvis Opii* gr. ij; statim sumend. Ordered, by Mr. BRODIE, to have a blister on the back of the neck, and to be cupped between the shoulders.

6. The blistering and bleeding have evidently done much mischief. He is much worse than he was yesterday; the trembling far greater than before; very incoherent in speech, manner, and gesticulation. Pulse still small and weak, and the tongue dry.

℞ *Morphiæ Acetat.* gr. ss, statim sumend. et repet. in dosis gr. ¼, sexta quaque hora. *Gin* ʒiv.

7. He is as much better to-day as he was worse yesterday; the trembling has greatly diminished. He dozed a little during the night, and was not so delirious. Pulse weak, and still some excitement; bowels not relieved these two days.

℞ *Pulvis Gum. Opii* gr. iiss; *Calomelanos* gr. iv; statim sumendus, et quartis horis repetend.
Haustus Sennæ ʒij, cras primo mane sumend.

8. Still better; dozes but does not sleep soundly. The pulse rather stronger than it has been; the tongue is dry, hard, and furred.

℞ *Acetatis Morphiæ* gr. ¼, sextis horis sumend.; *Gin* ʒiv.

10. Going on very well, and has slept soundly for some hours, except when intentionally awakened. Pulse 100, stronger and quick; tongue clean; bowels open.

12. Continues to improve; no delirium for the last twenty-four hours; has slept well, and the tremulous motion of the limbs has nearly subsided; no giddiness, confusion, or headach; pulse 70 and quick; tongue becoming clean. The bowels are kept open by the haustus sennæ. He was ordered a quarter of a grain of *Morphine* every eight hours.

17. The delirium has completely subsided under the use of the morphine, and

he is now becoming convalescent; pulse 80 and natural; tongue clean and bowels open. He has discontinued the opium, takes his usual diet, and continues the gin.

20. He was discharged cured to-day.

IRREGULARITIES AT THE LONDON HOSPITAL.—*To the Editor of* THE LANCET.—In your last Number you have inserted a short note from a person calling himself *Cœliac Axis*. It appears to me that he has mistaken his name. He ought to have signed himself *Splenics*, the eldest son of *Cœliac Axis*, as that name is certainly more appropriate for one who has impugned the character of a gentleman in the pure spirit of mischief, or on the principle that the blame should be equally divided amongst the surgeons, whether they deserve it or not. Mr. Andrews happens to be the only one of the surgical staff who has always taken up the interests of the pupils, and I cannot stand by tamely whilst he is falsely accused. Now, Sir, I am prepared to prove, that there is no hospital in London where the pupils meet with so little consideration as they do at this. I do not merely allude to the medical officers, but to the tricks of the House Committee, whose conduct has at times been so extraordinary, as only to be attributable to that giddiness of head which sudden elevation from obscurity sometimes produces in the ignorant. But I shall not enter further on this subject, my object being at present to deny, in the strongest terms, that Mr. Andrews is the origin of the present irregularity. I would only ask when it was that this irregularity did *not* exist. It has existed ever since I have known the hospital, and I have no doubt that it commenced in the days of the great Sir Fretful, long before your spirited publication laid open to the public the hole-and-corner system of surgery and physic. Like my friend *Cœliac*, my name and address shall be at your service, if you desire them. At present I must be, what my enemies must confess me to be,

Yours truly,

CANDID.

London Hospital, April 28th.

INFIRMARY FOR DISEASES OF THE SPINE.

PUBLIC meetings have lately been held at the Gothic Hall, New Road, for the purpose of establishing an institution, for the cure of deformities of the vertebral column, under the name of *Harrison's Spinal Infirmary*. A report of the last meeting, held April 26th, John Underwood, Esq., in the chair, contains the following paragraph:—"It was moved by G. Lunn, Esq., and unanimously carried, 'That the thanks of this meeting be given to Dr. Harrison, for his noble donation of one thousand pounds.' Mr. Lunn testified, from his long acquaintance with that gentleman, to his zeal for the diminution of human suffering, and the promotion of human happiness." From this gift the institution most probably derives its name. A vote of thanks also was moved "by Captain Underwood to Dr. Harrison and Dr. Serny, and to Mr. Thornber and Mr. Hoyland, surgeons, for their offer of gratuitous medical services." Amongst the speakers in favour of the proposed Infirmary were, Dr. Epps, C. Wing, W. Sedgwick, and — Levison, Esqrs. A correspondent informs us, that after the meeting was concluded, Dr. Harrison exhibited several misshapen spines, in confirmation of his own doctrines and practice; also various casts taken from deformed patients, previous to medical treatment, who had obtained complete cures by his mode of practice. One of the skeletons represented the hump-back described by Mr. Pott. The vertebræ were all sound and healthy, which proves that that eminent surgeon had mistaken the nature of these formidable maladies. Another skeleton exhibited a striking example of the lateral curve, and was completely at variance with the principle upon which muscular or gymnastic exercises are said to be useful. Dr. Harrison declared that no cure had ever been performed by muscular exercise alone.

The institution will be opened for the reception of patients as soon as the funds are sufficient for the purpose.

When Sir ***** ******* called on Lord ——— immediately after his examination before the Parliamentary Medical Committee, his lordship jocularly exclaimed, "I *hear* they have given you a good grinding at the Committee. But, really, Sir *****, how did they treat you?" "Oh, my lud, most vulgarly. With a few exceptions they were nothing but uneducated tradesmen. I scarcely knew how to answer their questions, they were proposed in such coarse and ungrammatical terms." "Well," retorted his lordship drily, "some of the committee are rich enough to be better educated. One of them is a cousin of mine, and sufficiently wealthy to purchase a whole bench of peers." Sir ***** was astounded, and withdrew in haste.

PARLIAMENTARY COMMITTEE.—The examinations before the Parliamentary Committee of the House of Commons continue to be prosecuted with the utmost vigour. Last week the most striking occurrence was the delivery of a lecture on midwifery by the DIVINE DOCTOR. This week the President of the College of Surgeons has been examined,—more than once blushing for the honour of the self-perpetuating twenty-one. On Tuesday the first witness called was Dr. Frampton, after which Mr. Guthrie made his appearance, and his evidence was continued during Wednesday and Thursday. The Committee-room continues to be crowded with members of the profession, and the examinations excite the greatest possible interest. The interrogation of the members of the Council of the College of Surgeons will, most probably, occupy the time of the Committee throughout the whole of next week.

ARREST OF HEMORRHAGE FROM LEECH-BITES.—A correspondent says, I was lately summoned to attend to suppress bleeding from a leech-bite in a child, and without success employed all the ordinary modes. As a last resource, before employing the actual cautery, I was induced to try plaster of Paris, in the same state as when taking a cast. I put a spoonful on the bleeding orifice, with the most happy result.

CORRESPONDENTS.

LEWIS *v.* GOLDSMITH.—The paper containing the report of the trial at the Somerset Lent Assizes reached us, but the particulars were not sufficiently interesting for publication in a medical journal. The evidence of Mr. STANDERT of Taunton was admirable. The plaintiff was peculiarly fortunate in calling that gentleman as a witness. The evidence for the defence was weak, and by no means judicious. It is absurd to imagine that the claims of a medical practitioner can always be estimated by a reference to the mere nosological character of the maladies of patients. The minds of men are differently constituted, and one man labouring under a trifling injury, will imagine that he requires fifty times more attention than another individual who may be suffering under a peculiarly dangerous complaint. Mr. STANDERT was most successful in his explanation of both varieties of mind and constitution, and thereby secured the interests of the plaintiff.

The attack of *Causticus* on the APOSTATE—the despicable APOSTATE—is severe; but attacks of this description are not morally useful when they are made by invisible hands. *Causticus* may rest content. At the proper hour the real character of the APOSTATE shall be developed by THE LANCET.

The letter of *M. M.* next week.

Mr. Tutterley. We are not aware of the publication of any such article in THE LANCET.

A Correspondent who has "no professional friend in London."—There can be no legal claim, unless our correspondent can prove by evidence that he was employed by the master or his acknowledged agent. This reply was accidentally omitted in our last Number.

A Primitive Subscriber. (*a*) The lectures of Mr. Lawrence, corrected by himself, in THE LANCET. Further, the essays on Diseases of the Eye in the last edition of Cooper's Surgical Dictionary. They contain a considerable portion of valuable matter, while the rubbish has been carefully rejected. Three-fourths of the works on diseases of the eye are utterly useless to practitioners, the greater part of such productions being nonsensical speculations of interested empirics.—(*b*) A distinct statement of the law grievances should be addressed in writing to the chairman of the Committee.

B. R. The continuance of the complaint must depend on the continuance of the cause. If the source of irritation be removed, the malady will disappear. The practice of giving advice in medical journals is empirical, and cannot be too severely reprobated. Our correspondent should attend rigidly to the directions of his surgeon.

G. L. W. Established rights will be protected. In guarding the interests of the public, just provision will, doubtless, be made for the conduct and government of every department of pharmacy.

A Nervous Man. It has been tried without success.

The cases of *Mr. Horne* and *Mr. Batten* have been received.

A medical association has been formed in St. Pancras. We have not room this week for an abstract of the regulations by which it is to be governed.

ERRATUM.—In the extract, page 166 of our last No., line 18 from the bottom, *for* "as there was no reason," *read* "as there was reason." As the printed copy of the extract was sent to the printers, we cannot account for the oversight.